Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

A984A
Cop. 3

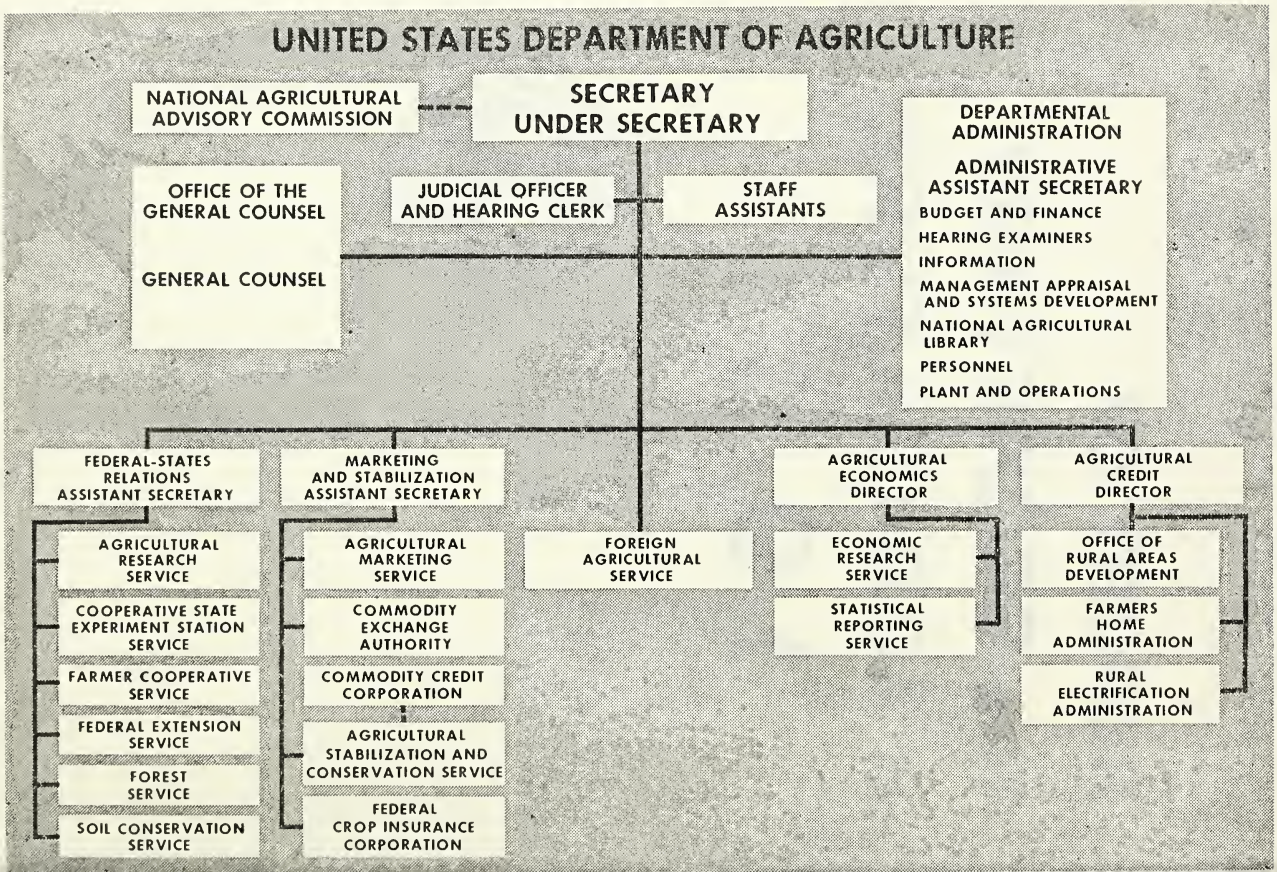
U. S. DEPT. OF AGRICULTURE
NAT... LIBRARY
JUN 1 0 1954
CURRENT SERIAL RECORDS

REPORT OF The SECRETARY of AGRICULTURE

1961

REPORT OF
The SECRETARY
of AGRICULTURE
1961

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington 25, D.C. – Price 30 cents


UNITED STATES DEPARTMENT OF AGRICULTURE
NATIONAL AGRICULTURAL ADVISORY COMMISSION
SECRETARY
UNDER SECRETARY
OFFICE OF THE GENERAL COUNSEL
GENERAL COUNSEL
JUDICIAL OFFICER AND HEARING CLERK
STAFF ASSISTANTS
DEPARTMENTAL ADMINISTRATION
ADMINISTRATIVE ASSISTANT SECRETARY
BUDGET AND FINANCE
HEARING EXAMINERS
INFORMATION
MANAGEMENT APPRAISAL AND SYSTEMS DEVELOPMENT
NATIONAL AGRICULTURAL LIBRARY
PERSONNEL
PLANT AND OPERATIONS
FEDERAL-STATES RELATIONS ASSISTANT SECRETARY
MARKETING AND STABILIZATION ASSISTANT SECRETARY
AGRICULTURAL ECONOMICS DIRECTOR
AGRICULTURAL CREDIT DIRECTOR
AGRICULTURAL RESEARCH SERVICE
COOPERATIVE STATE EXPERIMENT STATION SERVICE
FARMER COOPERATIVE SERVICE
FEDERAL EXTENSION SERVICE
FOREST SERVICE
SOIL CONSERVATION SERVICE
AGRICULTURAL MARKETING SERVICE
COMMODITY EXCHANGE AUTHORITY
COMMODITY CREDIT CORPORATION
AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE
FEDERAL CROP INSURANCE CORPORATION
FOREIGN AGRICULTURAL SERVICE
ECONOMIC RESEARCH SERVICE
STATISTICAL REPORTING SERVICE
OFFICE OF RURAL AREAS DEVELOPMENT
FARMERS HOME ADMINISTRATION
RURAL ELECTRIFICATION ADMINISTRATION

Department of Agriculture,
Washington 25, D.C.

THE PRESIDENT,
The White House, Washington, D.C.

DEAR MR. PRESIDENT: It is my privilege to present to you this report on the services rendered by the Department of Agriculture to our farm people and the entire Nation during the past year.

In your message to the Congress of March 16, 1961, you stated that in "no other country, and at no other time in the history of our own farm economy, have so many people been so well provided with such abundance and variety at such low real cost."

You pointed out the paradox that this very abundance had been a major factor in a "steady and continuing decline" in farm income, so that as our farm families entered the 1960's their incomes were "lower relative to the rest of our population than at any time since the 1930's."

Further, though abundant production had filled our bins and warehouses, 1 out of 10 American households had a diet so inadequate as to fall below two-thirds of the standard nutritional requirements.

These paradoxes, you said, are of concern to farmers, taxpayers, and consumers. They affect the vitality of the Nation, the strength of agriculture's most basic industry, and the economic health of every U.S. community.

In the pages of this report you will find presented a brief account of the efforts of the U.S. Department of Agriculture, in accordance with your directives and under your leadership, to resolve these paradoxes. Here are presented many specific examples of the work of the USDA agencies, its scientists, technicians, and administrators.

Above all, this report is a testimonial to the dedicated efforts of the USDA personnel who, having fully accepted your concept of the public service as a proud and lively career, take pride in being able to say, "I served the U.S. Government in that hour of our Nation's need."

With pleasure I submit herewith my first annual report as Secretary of Agriculture for the year 1961.

Orville L. Freeman

ORVILLE L. FREEMAN,
Secretary of Agriculture.

CONTENTS

	Page
A NEW START	1
RESEARCH FOR BETTER LIVING	8
Agricultural Research Service	8
Agricultural Economics	16
CONSERVING OUR NATURAL RESOURCES	21
Soil Conservation Service	21
Forest Service	26
STRENGTHENING RURAL AMERICA	31
Cooperative Agricultural Extension Service	31
Rural Areas Development Program	35
Farmer Cooperative Service	37
MARKETING OUR ABUNDANCE	39
Agricultural Marketing Service	39
Foreign Agricultural Service	49
Commodity Exchange Authority	54
PROTECTING FARM PRICES AND INCOME	55
Agricultural Stabilization and Conservation Service	55
Federal Crop Insurance Corporation	69
PROVIDING ADEQUATE CREDIT	70
Farmers Home Administration	70
Rural Electrification Administration	73
THE RECORD AND THE OUTLOOK	75

REPORT OF

The Secretary of Agriculture 1961

A NEW START

The year 1961 might well be called the year of a "new start"—for agriculture as well as for the whole Nation. After 8 years of frustration and increasing distress for farmers, steps were taken to point a new direction for agriculture, a new outlook for farm people, and a new appreciation by the general public of agriculture's place in the national economy.

Grave problems confront agriculture in the 1960's, stemming from great changes in the preceding decade. The changes fall into three major categories:

1. A vastly increased agricultural productivity.
2. A sharp drop in farm income.
3. A heavy and mounting burden of agricultural surpluses.

Increased Productivity

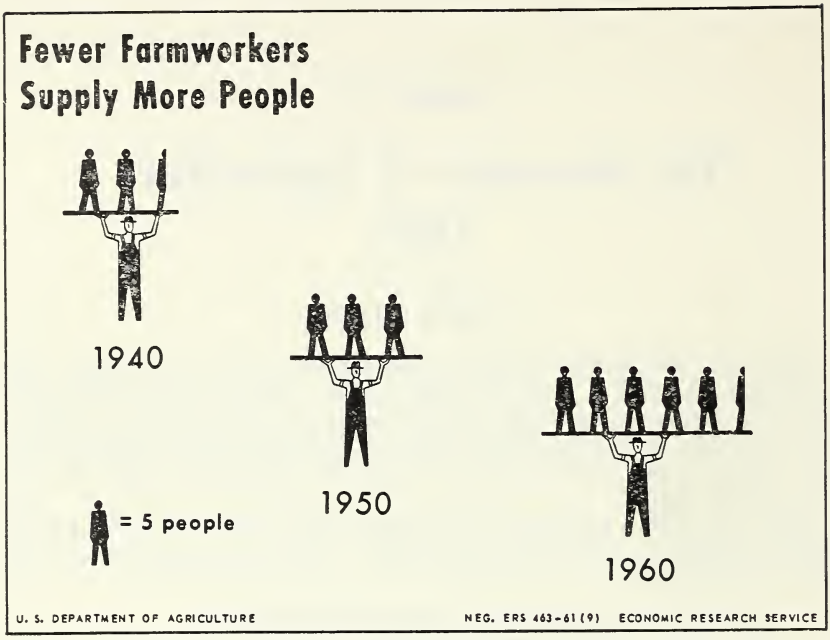
During the 1950's an agricultural technological revolution—more accurately an explosion—resulted in an increase of 80 percent in actual production per person engaged in farming. The increase in output per man-hour of labor was greater still, almost doubling. Despite 28 percent fewer persons working in agriculture, and despite vigorous efforts to take and keep land out of crops, farm output during the decade rose 28 percent.

Here is what this technological explosion meant in terms of some specific commodities: Farmers produced—

- 33 percent more wheat in 1960 than in 1950 on 16 percent fewer harvested acres
- 41 percent more corn on about the same number of acres
- 43 percent more cotton on 14 percent fewer acres
- 65 percent more sorghum for grain using about 50 percent more acres
- About 5 percent more milk with 20 percent fewer milk cows

The technological revolution enabled fewer farm people to feed a larger national population better and at relatively less cost.

In 1950, farm population was estimated at 25 million, one-sixth of the total population. In 1960, people on farms numbered 16 million, about one-eleventh of the total population.



Meantime the national population rose from 151 million in 1950 to 181 million at the end of 1960—an increase equal to the combined 1950 population of the 26 smallest States in the Union. Yet the people of the United States consumed *more* food and *better* food per capita in 1960 than a decade earlier.

Even with a considerable rise in food marketing charges, the average U.S. consumer was able to purchase his food needs with an increasingly smaller part of his take-home pay.

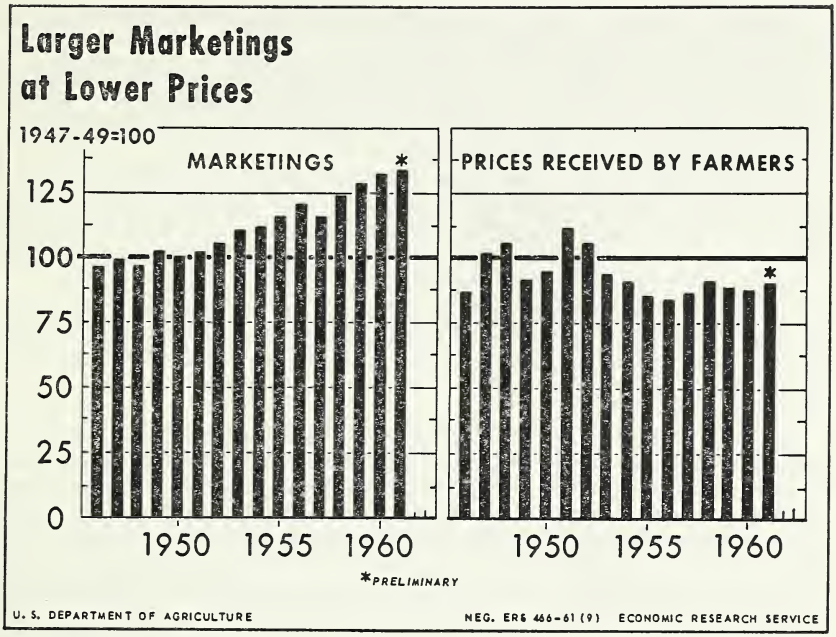
While agriculture as a political entity had become less meaningful and influential than perhaps at any other period in the Nation's history, the contributions of agriculture to the national economy had grown more important. More people by far depended on fewer farmers by far to provide greater production of food and fiber by far than in earlier periods of U. S. history.

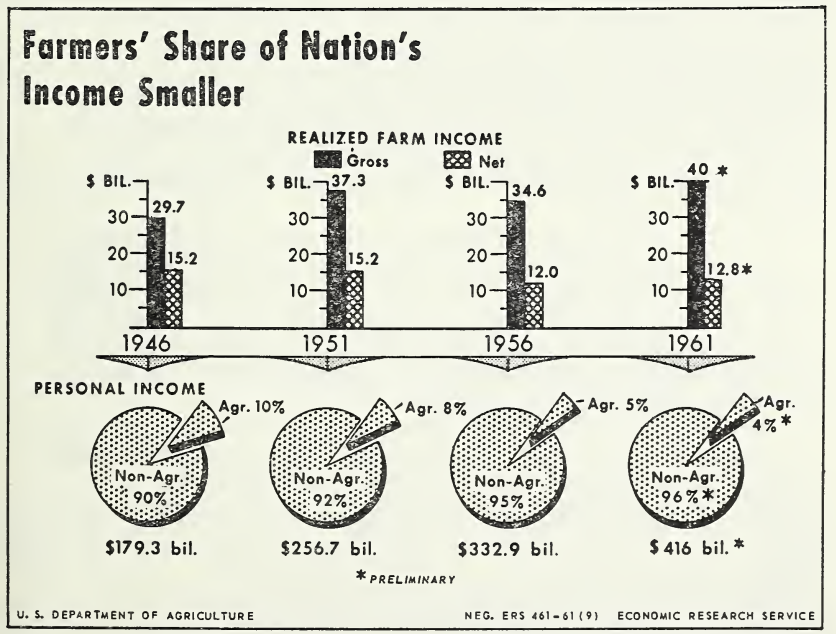
Truly, the U.S. farmer has achieved dramatic success as a producer.

Declining Income

Unfortunately, the abundance farmers produced did not bring them increasing economic reward, but a growing economic distress. While total farm output in 1960 was 29 percent higher than the 1947–49 average, the net return to farm operators was 26 percent lower.

The facts concerning specific farming segments clearly point to an unhappy situation in the Nation's agriculture. Comparing 1947–49 with 1957–59, we find that New Jersey egg producers raised net production per farm 54 percent—but net farm income dropped 68 percent.


Larger Marketings at Lower Prices
1947-49=100
MARKETINGS
PRICES RECEIVED BY FARMERS
125
100
75
50
25
0
1950
1955
1960
*PRELIMINARY
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 466-61 (9) ECONOMIC RESEARCH SERVICE


Farmers' Share of Nation's Income Smaller
REALIZED FARM INCOME
Gross
Net
$ BIL.
29.7
15.2
37.3
15.2
34.6
12.0
40 *
12.8*
1946
1951
1956
1961
PERSONAL INCOME
Agr. 10%
Non-Agr. 90%
Agr. 8%
Non-Agr. 92%
Agr. 5%
Non-Agr. 95%
Agr. 4%*
Non-Agr. 96%*
$179.3 bil.
$256.7 bil.
$332.9 bil.
$416 bil.*
*PRELIMINARY
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 461-61 (9) ECONOMIC RESEARCH SERVICE

643251—62——2

Eastern Wisconsin dairy farmers raised production per farm 42 percent—but income dropped 2 percent.

Wheat, small grains, and livestock producers in the Northern Plains raised production 16 percent—but income dropped 28 percent.

Hog-beef producers in the Corn Belt raised output per farm 36 percent—but income dropped 28 percent.

For the period 1957–60, large tobacco farmers earned a "wage" varying from 43 cents to $1.07 after expenses. Hog-beef farmers in the Corn Belt earned from 27 to 99 cents an hour. Cattle ranchers in the Northern Plains earned from 41 cents to $1.07. These are figures for full-time commercial enterprises.

The U.S. farmer could not be expected to continue to invest his capital, labor, skill, and managerial ability for a material reward that was so shockingly low.

Growing Surpluses

A third great change confronting agriculture was the growth of surpluses during the 1950's. In 1952 the total Government investment in price-supported farm commodities was less than $2.5 billion. During the next 8 years it grew to more than $9.2 billion. The Government inventory of wheat, which in 1952 was 132 million bushels, by 1960 had risen to over 1,100 million bushels. For corn the corresponding figures were 280 million bushels in 1952 and almost 1,500 million in 1960.

These mounting surpluses not only exerted a depressing influence on the market for farm products; they cost the Government ever-increasing amounts in storage, handling, interest, and other charges. These costs had risen to an annual rate of $1,082 million by 1960.

It was too much to expect the taxpayers of the Nation to underwrite an indefinite continuation of programs and policies under which the U.S. Government paid ever-increasing amounts for stockpiles of commodities that threatened to become ever more unmanageable.

Agricultural policy in 1961 was directed toward meeting the problems occasioned by these three major changes. Our basic goals were also three in number:

1. Production of enough food and fiber to supply the requirements for a high standard of living for all the people of the United States, now and in the foreseeable future.
2. Assurance to efficient operators of family farms that they would have opportunity to achieve parity of income with other comparable economic groups without exploiting either consumers or taxpayers.
3. Wise use of our abundance to promote health and vigor among the American people while encouraging economic growth, peace, and freedom throughout the world.

These are the three major objectives we sought in 1961, and continue to seek, for the benefit of agriculture, farmers, and the entire Nation.

Fundamental to their achievement is an adequate understanding on the part of the American people of the contributions, problems, and needs of U.S. agriculture in the present era.

On taking office, we were shocked to find this necessary understanding almost wholly lacking in the general public. Actually, an understanding gap of mammoth proportions existed concerning agriculture. Far from praising farmers for producing abundance, the average citizen blamed them, not realizing that the farmers' amazing productivity was the base upon which our high U.S. standard of living was founded.

The public considered farmers inefficient, not knowing that in the 1950's agriculture's productivity per man-hour had increased three times as fast as that of nonagricultural industry.

What made this understanding gap particularly dangerous was the fast-shrinking proportion of the national population represented by farm people. Our farm population today makes up less than 9 percent of the national population. In absolute numbers there are fewer people on farms now than there have been at any other time since the Civil War.

More than at any other time in the past 100 years, therefore, the enactment and maintenance of farm programs depend upon the understanding and support of nonfarm people. Only when agriculture's capability as an instrument of national well-being and a force for world peace is adequately appreciated; only when its problems are viewed in the light of their effect on the stability and vitality of the whole economy; and only when agriculture's needs are understood as being intimately related to the national welfare will the farmers of the United States be able to live up to their full potential.

Consequently, *we made it a foremost concern in 1961 to promote better public relations for agriculture among both the nonfarm public and farmers themselves.* This effort consisted in part of attempts to portray in challenging and dramatic terms the present position of agriculture in the United States. The members of my staff and I endeavored to promote this work of public education in all our presentations to the American people, whether on the speaking platform, in newspapers, magazines, or pamphlets, or on radio or television. The entire Department participated in this effort to portray a true image of agriculture.

In this and other endeavors on behalf of agriculture, we sought the cooperation of all who are interested in agriculture.

Six days after the inauguration a Conference on Policies and Programs for American Agriculture met in the Department. In addition to the formal participants representing the National Grange, the National Farmers Union, the American Farm Bureau Federation, the National Council of Farmer Cooperatives, and the Cooperative League of the USA, some 300 persons likewise interested in agriculture took part.

Throughout the year we continued to seek the broadest communication and cooperation by consulting with agricultural leaders, and especially with the various commodity committees and the National Agricultural Advisory Commission.

We consulted with nonfarm leaders and groups on matters within their province. For example, many of the Nation's leading food industry executives met with USDA officials to confer on the pilot food-stamp project.

The advice of farm producers and others is invaluable in developing policies and seeing to it that they are carried out. In an industry involving millions of widely scattered producers, decisions and programs cannot be dictated from Washington. They must be based upon understanding and cooperation. Agriculture needs programs that start from the grassroots, programs democratically arrived at, producer developed and producer administered.

In accordance with this general policy of promoting wider public understanding and in pursuit of the three major objectives—adequate production, parity of income, and a wise use of abundance—we took, or stimulated, action in the following areas in 1961:

1. *To bring about a more effective coordination of its various activities, we reorganized the Department of Agriculture.* A Statistical Reporting Service and an Economics Research Service, both under the authority of the Director of Agricultural Economics, were established to bring together statistical reports and economic research activities formerly carried on by a number of different units in the Agricultural Marketing Service. The Agricultural Conservation Program Service was transferred to the Agricultural Stabilization and Conservation Service. Responsibility for policy direction in formulating and administering marketing agreements and orders was assigned to the Assistant Secretary for Agricultural Stabilization. The General Sales Manager for the Agricultural Stabilization and Conservation Service and his staff and the Barter and Stockpiling Divisions were transferred to the Foreign Agricultural Service.

The farmer committee system, operating in every county, was revitalized by a return to them of the responsibility for administering farm programs at the local level. Election procedures were improved by allowing direct election of committeemen, and committeemen now have direct supervision over administrative help.

2. *To bring about a better balance between the supply and demand* for feed grains, to reduce the high costs of storage and handling surpluses, and to increase farm income, an emergency feed grain program was proposed by the Department and enacted into law by the Congress. To be eligible for price support, producers were required to reduce their 1961 corn and grain sorghum acreage at least 20 percent below their 1959 and 1960 adjusted base acreage. Producers could divert, if they desired, an additional 20 percent. The combined acreage signed for diversion totaled 26.7 million acres, or nearly 25 percent of the 1959–60 total base acreage for the United States. Those participating in the program totaled about 42 percent of all farmers producing corn and sorghum grain.

3. *Other actions were taken to improve farm prices and incomes and to promote the effectiveness of agricultural operations.* Price-support levels were raised for a number of commodities, including cotton, rice, peanuts, milk, corn, grain sorghums, oats, barley, rye, soybeans, flaxseed, and cot-

tonseed. Additional funds for farm-housing and farm-operating loans were made available through the Farmers Home Administration. Rural Electrification Administration loans for electric and telephone service in rural areas were increased. Steps were taken to encourage grain storage on farms. A Rural Areas Development Program was provided to help find permanent solutions to the problems of chronic poverty in low-income rural areas.

4. *Legislation recommended by the administration resulted in the constructive and far-reaching Agricultural Act of 1961.* The act authorized a wheat program designed to bring wheat production more in line with needs, meanwhile providing for a reduction in the costs of the wheat program to taxpayers and increased income for wheat producers. The emergency feed grains program was extended to the 1962 crops, with barley added to the program. Marketing orders were authorized for producers of turkeys, turkey hatching eggs, peanuts, and a number of other commodities. The wool price-support program was extended for 4 years. The School Milk Program was extended for 5 years. The Great Plains Conservation Program was extended for 10 years. Farm credit terms for low-income farmers were liberalized. The Agricultural Trade Development and Assistance Act was extended for 3 years with expenditures up to $4½ billion authorized over a 3-year period and a ceiling of $2 billion in any 1 year.

5. *Steps were taken to make more effective use of our abundance both at home and abroad.* Following Executive Order No. 1, the quantity of surplus foods distributed to the needy was more than doubled and the available foods were increased from 6 to 11. Pilot food-stamp programs were launched in eight areas of the country where unemployment was chronic. The food-for-peace program was expanded and improved with authorization of an additional $2 billion for calendar year 1961 for title I operations under Public Law 480. Food-for-peace commitments in 1961 exceeded $5 billion, 2½ times the total commitments of 1960. The first comprehensive study of the world food gap was prepared and released—an important step toward a minimum healthful balanced diet for the world's people.

Stimulated by activity in these areas, the year 1961 was a hopeful one for most farmers.

Rural America turned away from the dismal trends of the 1950's and began to move toward the goal of economic equality with other groups in the Nation.

Net farm income increased by more than $1 billion to reach $12.8 billion—the highest since 1953.

The value of farm assets increased by $5.2 billion to a record high of $211.3 billion as of the end of 1961.

Farm equities—assets minus debts—reached a record $184.1 billion—a gain of $3.4 billion during 1961.

Exports for the calendar year were more than $5.0 billion—a new record and $192 million more than in 1960.

Due principally to the feed grain program, production of corn was reduced 7 percent and grain sorghums 22 percent below 1960, making possible the first cut in Government feed grain stocks since 1952.

Agricultural abundance was more widely and wisely distributed through expanded direct food distribution, the school lunch and school milk programs, the beginning of a pilot food-stamp plan in eight localities, as well as through the food for peace.

The Agricultural Act of 1961 took an important stride toward the concept of managed abundance through a commodity-by-commodity approach and the expanded use of marketing orders and agreements planned and administered by farm producers.

The level of economic activity in most farming communities, as reflected by retail sales along Main Street, rose from 10 to 15 percent over 1960.

This is not to say that all farmers shared in the financial improvement during 1961. Sheep ranchers, poultry and turkey producers, and growers of late potatoes suffered because of exceptionally low prices. Drought reduced crop production in a large area extending through the northern parts of the Lake States, the Dakotas, and the Mountain States.

The dominant note, however, as 1961 ended, was a note of hope.

As I travel around the country talking to many thousands of farm people, I am impressed with one fact above all: Farmers *know* that agriculture is once again moving ahead. Therefore, they look to the future with renewed hope and confidence. Income is on the way up. The surpluses are beginning to move out. Abundance is being put to better use. The farmer is finding once again that he has a voice in managing his own affairs.

Four words sum it up: AGRICULTURE IS MOVING AGAIN.

What the U.S. Department of Agriculture did in fiscal and calendar 1961 to help agriculture move toward the achievement of the three basic objectives of adequate production, parity of income, and wise use of abundance is detailed in the pages that follow.

RESEARCH FOR BETTER LIVING

Agricultural Research Service

From the earliest days of the U.S. Department of Agriculture to the present, research has always been one of its biggest, most important, and most satisfying responsibilities.

Different periods bring different needs and different needs bring different emphasis to research. From what was years ago an almost exclusive preoccupation with production research, the USDA has

recently stressed more and more research to develop new uses for farm products and new and expanded markets.

Now we are adding to production, utilization, and marketing research, what might be called research for survival.

Research for Survival

USDA scientists are studying ways to protect the Nation's food supply from the hazards of both nuclear testing and nuclear attack.

They have devised a laboratory method to remove strontium 90 from milk at dairy plants in the event that radioactive contamination of foods becomes a health hazard. Laboratory treatments with ion-exchange resins have successfully removed most strontium 90 from contaminated milk without impairing the flavor. Research is going forward to fit this technique to commercial use. This research could be of the utmost importance in the Nation's future.

Family Food Stockpile for Survival, a 16-page bulletin, summarizes vital information on food and water that could save millions of lives in case of nuclear attack. Prepared in cooperation with the Office of Civil and Defense Mobilization, this bulletin provides a guide to the amounts and kinds of foods that will keep for months without refrigeration, requiring little or no cooking, and furnishing a reasonably well-balanced diet for up to 2 weeks.

Among the tested products proving highly acceptable as emergency rations is a wafer made of bulgur, the parboiled dried wheat popular in the Near East and the Orient. This wafer is one of three products to come out of a method recently developed by utilization research for efficiently producing bulgur on a large scale. A second process, yielding a dried bulgur that meets specifications for food-for-peace purchases, has been adopted this year by U.S. manufacturers. The third process makes a whole-grain canned product that we expect will create new markets for wheat both at home and abroad.

Nutrition and Consumer-Use Research

In 1961, 1,400 low-income families, most of them city dwellers, made detailed reports on their supplies and consumption of food during a week in the spring and a week in the fall. They were cooperating with USDA home economists in a survey to measure the effectiveness with which food-stamp programs put more food on the tables of the Nation's needy. This information will guide us in new food distribution and nutrition education programs.

We are continually filling in more and more of the picture of human needs for food and the role of various foods in growth and health.

The wisest possible use of agricultural abundance is vitally necessary to the national welfare. Such use depends on full information of many kinds and in many areas.

For the first time, scientists have brought together widely scattered data on the basal energy requirements of children and youth. Analysis of all available data shows that a child's basal calorie needs per unit of body weight decrease progressively with physiological age—from preschool to school age to puberty and postpuberty. This and other information will help scientists conduct additional research and set guidelines for new investigations.

Studies done in cooperation with the University of Arkansas and the University of Alabama produced important new evidence of the relationship between blood cholesterol and dietary fat. Previous research showed wide differences in the composition of household fats. The proportion of saturated fat to linoleic acid (unsaturated fat) ranges from 25 to 1 in beef, veal, and lamb to less than one-half to 1 in vegetable oils and salad dressing, with that of hog and chicken fat midway between the two. The new studies, of young men on controlled diets, showed that blood cholesterol dropped as the ratio of linoleic acid to saturated fats in their dietary fat was increased. Other research has demonstrated that blood cholesterol is affected not only by dietary fat but also by the kind of carbohydrate, the kinds and amounts of proteins, and the kinds and amounts of minerals and vitamins in the diet. Thus, gradually, we are learning more about diet, nutrition, and their relationship to heart attack and other ailments.

A new guide for scientists who set tolerance limits of chemical residues is based on a recent analysis of data in the nationwide household food surveys. The amount of a given food consumed is obviously important in determining tolerance. Analysis shows that high-consuming groups use from 1.5 to 3.5 times as much of certain foods as the average consumer. A significant example is the fact that consumption of processed milk by infants and small children is nine times that of the average user.

Utilization Research

Soy flour is in heavy demand in newly developing countries as a low-cost, high-protein food. It can now be produced more economically in plants equipped with a desolventizer unit designed by USDA research. The equipment removes solvent from extracted soybean meal without heat damage to the protein. Two U.S. processors installed the units this past year.

The food industry is increasingly interested in concentrates. Our chemical engineers report a new technique of value to makers of dried soup mixes. This is a process for preparing dried vegetable pieces so they can be rehydrated in a fraction of the time required for products now on the market.

What are the elements that produce flavor in meat? USDA biochemists this year added significantly to our understanding of the chemistry of meat flavors. The substances that give beef, pork, or lamb the distinctive flavor of the species come largely from the fatty tissue. Not flavors in themselves, they are "precursors" that develop flavor on heating. The precursors have been identified as low-molecular-weight carbohydrates and polypeptides as well as amino acids that produce flavor by interaction.

In analyzing 3,400 samples of uncultivated plants this past year, USDA scientists found vegetable oils and seed mucilages of unusual quality. The samples, including native plants and those collected abroad in Public Law 480 projects, were gathered from all over the world. Evidence of a plant's potential value as a source of raw material for industry is the first step toward the introduction of a new crop.

Two new processing techniques designed to overcome barriers to the sale of farm products merit special mention. One process, by attaching an invisible film firmly to the surface of wool fibers, makes wool shrinkproof and muss resistant. Industry is evaluating the process. The second technique substitutes activated alumina for the Fuller's earth conventionally used to bleach offcolor cottonseed oil. Pilot-plant studies will be made to develop cost data and other information necessary for large-scale processing.

Research Abroad

Expanding our research program financed by foreign currencies under Public Law 480, we can now draw more deeply from the scientific resources of Latin America as well as Europe, the Near East, and the Far East. Grants this year have been made to scientific institutions in Brazil, Colombia, Chile, Peru, Uruguay, Great Britain, France, Poland, Finland, Spain, Italy, Egypt, Yugoslavia, Turkey, Israel, India, Pakistan, and Japan. The findings should be of mutual benefit to the participating countries and the United States. We expect this research to help build markets for U.S. farm products, to supply our country with valuable plant-breeding materials, and strengthen our defenses against agricultural pests not yet established in the United States.

More Research Facilities

The completion of the National Animal Disease Laboratory at Ames, Iowa, marked a significant enlargement of our research plant in 1961. This Laboratory, the most modern of its kind anywhere, is one of three major research centers designed to protect and improve animal health. The others are the Plum Island (N.Y.) Animal Disease Laboratory for the study of foreign diseases of animals and the Parasitological Research Laboratory at Beltsville, Md.

Three new entomology laboratories now nearing completion will make it possible to focus varied scientific skills on the control of specific pests—the cotton boll weevil in the laboratory at State College, Miss., southern grain insects in the laboratory at Tifton, Ga., and northern grain insects in the laboratory at Brookings, S. Dak.

In addition, money has been appropriated and plans are going forward to construct laboratories for basic research in entomology at Fargo, N. Dak., and Columbia, Mo. The Fargo plant will be devoted to studies of insect metabolism and radiation research; the Columbia lab to biological control of insects.

We are building new facilities for soil and water research at three locations and adding a wing to the building of the U.S. Plant, Soil, and Nutrition Laboratory at Ithaca, N.Y. We have awarded a contract for construction of an office-laboratory building on the USDA Southwestern Great Plains Field Station at Bushland, Tex. New facilities for soil and water research at Pullman, Wash., and Twin Falls, Idaho, are in the final stages of planning.

Plans are being drawn up for a soil and water laboratory at Florence, S.C.

The hydrology research centers now being set up at Columbia, Mo., and Tucson, Ariz., will provide information urgently needed on available water resources and what constitutes most beneficial use.

643251—62——3

Funds were appropriated and we have begun construction of an administration building for the National Arboretum, Washington, D.C.

Pioneering Studies

Back of many scientists conducting problem-oriented research in agriculture is a small group of workers in our pioneering research laboratories whose task is to explore the frontiers of knowledge. Far-reaching contributions have come from these laboratories during the past year.

The discovery of a heritable blood antigen in hens is a milestone in the search for chemical and physical attributes of genes and antigens. In this instance, the antigen depends upon the estrogen (female hormone) level in the blood and is present only during the hen's egg-laying stage of life.

A formula for modifying plant growth-regulating compounds, so that they move through a plant at six or seven times the translocation rate for an unmodified compound, sets the stage for advances in research on weed-control chemicals and plant nutrition.

USDA research added to our knowledge of cancer this past year. Poultry scientists, using specially developed inbred lines of chickens, identified the gene that controls resistance or susceptibility to the avian leukosis complex.

In a cooperative study with the Armed Forces Institute of Pathology, we have begun work leading to a statistically accurate measure of the incidence of malignant lymphoma in cattle. The refinement of diagnostic and reporting techniques is needed to determine to what extent incidence of the disease may be trending upward in various cattle-production areas of the United States.

Advances in Pesticides

Notable gains in the formulation of insecticides are based on new knowledge of insect life processes. The new compounds give effective control in extremely low doses.

Among the dramatic advances are two chemical lures for use in detecting and delimiting infestations of gypsy moth, a scourge of hardwood forests. Previously the sex attractant used for this purpose was extracted from thousands of female moths raised in captivity. Biochemists in entomology research identified and isolated the components of the natural lure and reproduced the compound from synthetic materials. It can now be produced on a large scale and at a fraction of the cost of extracting natural lure.

Another group of chemicals under test to produce sterility in houseflies shows promising results. Bait containing aphoxide, one of three compounds under study, almost completely wiped out a large population of flies in an isolated garbage dump.

Basic studies of the physiology of cuticular waxes of many insects show the role of hydrocarbons in maintaining water balance and preventing desiccation. The findings indicate how insecticides and insect diseases adhere to and penetrate the cuticle and suggest leads for formulating new insecticides.

Productive Varieties

Improved varieties released from Federal-State plant-breeding research continued to add valuable resources to commercial crop production across the country. Among the newly released crop varieties are:

- Bergman, Franklin, and Pilgrim, three new cranberries. They are resistant to the leaf hopper that spreads false blossom virus disease and is a problem in New England bogs.
- Pennbel-69, a cigar-filler tobacco variety, highly resistant to both the wildfire and mosaic diseases that cause heavy losses in Pennsylvania tobacco production.
- Saginaw and Michelite-62, two high-yielding dry-bean varieties of special promise to Michigan and Idaho producers. Saginaw is the first navy-bean variety to combine resistance to anthracnose and common bean mosaic with good canning qualities.
- Denta, the first U.S. nonbitter white sweetclover, suitable for growing in the Northern Great Plains and the Western Corn Belt.
- Lathrop, a Hessian-fly-resistant spring wheat adapted for use in Wisconsin.
- Cherokee, a productive alfalfa for North Carolina.
- Belle Patna, an early maturing long-grain rice for Arkansas and Texas.
- Hale, a dwarf castorbean variety suitable for production under irrigation in the Southwest.
- Caldwell, a cold-hardy, high-yielding flax adapted for production in Texas.
- Two inbred lines of onions for producing hybrids that are resistant to pink root disease.
- Savoy Hybrid 12, a spinach with resistance to blight and blue mold disease and with an upright growth that makes it well suited for machine harvest.
- Blanco Mariout, a white barley of interest to California growers as an export commodity to countries where barleys are used as a rice supplement.
- Redtop, a freestone peach variety with unusually firm flesh that makes it suitable for shipping.
- Molalla, a disease-resistant strawberry especially suited to freezing. The variety is adapted primarily for growing in the Pacific Northwest.

Light and Plant Growth

We have moved a step nearer the time when farmers will be able to manage their forage crops to take full advantage of natural light in boosting yields. Laboratory studies of the relationships between sunlight, plant density, and growth rates have set the stage for further work from which recommendations for planting times and rates and harvests can be made.

Progress in Engineering

We look to further gains in farming efficiency from techniques and equipment perfected in agricultural engineering research during the past year. Among the most noteworthy advances are:

- Designs for equipment to harvest cling peaches and blueberries that permits two workers to match the output of 20 handpickers.
- Design of a sugarcane harvester that cuts, strips, and loads cane in one operation, thus speeding up delivery to the mill.
- Automatic temperature and moisture controls for cotton during ginning so that the inherent quality of the fiber is maintained.
- A mathematical formula that permits electric power suppliers to size transformers more adequately for farm service and to reduce costs of distribution.
- A rapid field method for determining the energy required to produce clods of specified size in different soils. This technique adds a valuable tool to research in farm-equipment design, soil science, and agronomy. It represents a significant step forward in soil management.

Plant Pest Control

Three years of effort to eradicate the pink bollworm from irrigated cotton lands of Arizona are proving highly successful. In nearly 14,000 collections trapped this year, only 1 pink bollworm moth was found. Land requiring treatment has been reduced from 75,000 to 11,000 acres.

Plant-pest technicians were alerted to a costly new threat to west-coast fruits, vegetables, and ornamentals in June, when Japanese beetle infestations were found in Sacramento, Calif. Previously, the beetle had been reported no farther west than Fort Madison, Iowa.

The USDA Summary of Registered Agricultural Pesticide Chemical Use tabulates more than 5,400 use patterns of 340 chemicals. Our food supply depends on our skill in using these chemicals with precision.

Plant Quarantine

Regulatory officials at ports and border stations intercepted nearly 327,000 lots of unauthorized plant material during the year and found dangerous plant pests in more than 25,000 lots.

Safeguarding this country against the entry of plant pests required the inspection of more than 130,000 planes, more than 57,000 ships, 64,000 railway cars, and well over 24 million trucks and automobiles.

U.S. regulatory officials inspected more than 37 million units of plant materials exported from this country to make sure they met requirements of importing countries.

Eradication of Animal Diseases

Hog cholera, a disease that costs U.S. swine producers up to $60 million a year and blocks pork sales to foreign markets in 11 countries, will be eradicated under a program authorized by the 87th Congress.

USDA research and regulatory forces have been mobilized to join with the States in setting up procedures.

More than 80 percent of the Nation's counties are now participating on an area basis in the bovine brucellosis eradication program. A goal of 1965 has been established for achieving modified certified status for the entire country.

The market-cattle testing program is proving a practical and effective means of advancing brucellosis eradication. That eradication—rather than control—of brucellosis in animals and man is a realistic goal is indicated by the fact that 73 counties in 11 States are now certified brucellosis free.

Progress in eradicating bovine brucellosis has focused attention on the problem of brucellosis in swine. In 1957, 60 percent of the cases of human brucellosis originated in cattle; only 40 percent in swine. In 1960, however, 65 percent of the reported cases of undulant fever were thought to be of swine origin. USDA and cooperating States have begun an intensive effort to wipe out swine brucellosis, the last remaining reservoir of the disease.

Humane Slaughter

Humane slaughter is fast becoming the rule in the U.S. meat industry. The national humane slaughter law, in force since August 1960, requires meatpackers who sell products to Federal agencies to use methods of slaughter declared by the Secretary of Agriculture to be humane. Nine out of every 10 of the 534 federally inspected slaughtering plants were using humane methods at the end of the first year the law was in effect. Latest figures for a single month's operation in the federally inspected plants showed that, of 9 million animals slaughtered, 8.5 million were dispatched in plants using humane methods.

Federal Meat Inspection

At the end of the 55th year of the continuous Federal meat inspection, this important regulatory service was being conducted in 1,451 establishments located in 599 cities and towns. During the past year more than 18 billion pounds of meat and meat food products were processed under the supervision of Federal inspectors.

Moisture Content of Smoked Pork

For many years USDA regulations prohibited the adding of water to smoked hams and other smoked pork processed under Federal meat inspection. In December 1960 the Department issued an order amending these regulations to permit the processing of smoked pork containing up to 10 percent more moisture than was present in the uncured product. After public hearings in which many groups had an opportunity to express their views regarding this change, we reinstated the regulations in effect prior to December 1960, providing that pork products not meeting requirements be labeled imitation. (This regulation was contested in the courts. New regulations now require that smoked pork products containing up to 10 percent added water be clearly labeled "ham—water added.")

Agricultural Economics

Economic and statistical information is vital to a sound understanding of the status of the agricultural economy. This is an age of facts. Great decisions are based on adequate knowledge of facts. By establishing in the Department a single Director of Agricultural Economics, who is responsible for a coordinated agricultural economic and statistical service, we have achieved a better use of available economic intelligence and information.

Various statistical reporting functions which had been located in three divisions of the Agricultural Marketing Service were brought together in a Statistical Reporting Service.

Widely scattered economic research activities which had been carried on by a number of units in the Agricultural Marketing Service, Agricultural Research Service, and the Foreign Agricultural Service were coordinated in an Economic Research Service.

Both of these new services are under the guidance and direction of a Director of Agricultural Economics.

The new setup quickly resulted in more effective work in statistical reporting and economic research.

Statistical Reporting Service

During fiscal 1961, the Statistical Reporting Service and its predecessor agency issued more than 500 scheduled reports on agricultural production, prices, employment, and other aspects of the Nation's agricultural economy. Many of these reports were paralleled by localized reports issued by the 43 State offices which service all 50 States. Nearly 700,000 farmers and businessmen, who supply the needs of farm families or who distribute farm products, voluntarily provided information on which the statistical reports were based.

Improvement in statistical methods continued to be emphasized in the development of agricultural estimates during 1961. Objective measurements, as applied to crop yields, were put on an operational basis for the corn crop in 15 States and for the cotton crop in 10 States.

This involved counting the plants, blossoms, and squares or bolls of cotton; and counting and measuring ears of corn in each sample plot, each month during the growing season, to provide the basis for forecasting the yield at harvest time. Such measurements were made in 1,790 cottonfields and 2,640 cornfields in 1961.

Objective yield measurements were also continued on a pilot basis for soybeans, wheat, tobacco, and several fruit and nut crops.

Enumerative surveys of random-selected "segments" or groups of farms were put on an operational basis in 15 States and continued on an experimental basis in 13 additional States. This involved personal visits to operators of more than 15,000 farms in June and a part of these farms in December to obtain data on such things as land utilization, acreage devoted to various crops, numbers of family and hired workers, wages paid, numbers of livestock and poultry, and grain in storage.

Both the objective measurement and enumerative survey techniques are used as supplements to the time-tested method of gathering data by mail from thousands of volunteer farmer-reporters.

The Statistical Reporting Service shared its experience in agricultural statistical work with visitors from 72 foreign countries during the fiscal year. The largest number of these visitors, 1,120, attended a 1-hour illustrated lecture on the work of the agency, and approximately half that number spent 1 or more days in consultation with SRS staff members. Seven trainees from five countries spent a year in formal study, including 4 weeks of introduction in SRS offices, 9 months of academic work at American University, and 2 months of field work under supervision of State agricultural statisticians.

In its services to other USDA agencies, the SRS provided the Agricultural Stabilization and Conservation Service with estimates of acreage and yields per acre of corn and sorghum grain for each commercial county, to guide acreage allotments and payment rates in the 1961 feed grain program.

The agency began to report the monthly average price of milk for manufacturing paid by plants in Wisconsin and Minnesota. This price is used in computing prices paid to producers under certain Federal milk marketing orders.

It provided defense planners with information on the location and capacities of refrigerated warehouses and summaries of supplies of food in cold storage, and it undertook a series of surveys to aid in the evaluation of pilot food-stamp programs.

New market-flow types of reports were started; these included a weekly report for tomatoes covering plantings and acreage remaining for harvest as well as harvest progress in Florida and South Texas and a monthly report for celery giving plantings and acreage for harvest in Florida, California, and Arizona.

In addition to the regular January 1 report on sheep and lambs on feed in 26 feeding States, the program was expanded to publish estimates of numbers on feed November 1 and March 1 in 7 leading States and estimates of placements, marketing, and weight groups on November 1, January 1, and March 1.

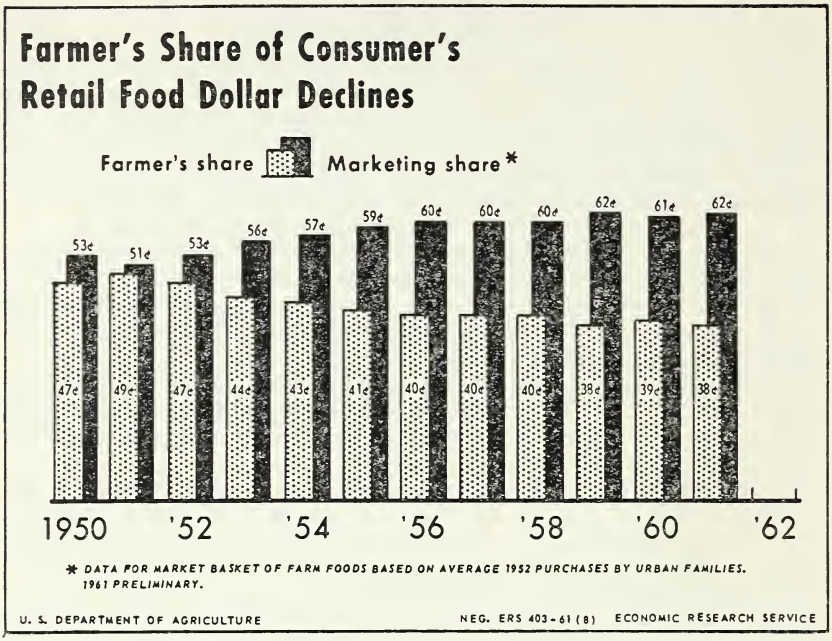
Economic Research Service

Through marketing economics research the Department seeks to increase efficiency and lower costs of marketing farm products in order to broaden markets and increase farmer returns.

Farm-produced food products in quantities bought during a year by a typical urban family cost $1,065 in 1961, up from $1,052 in 1960. All of this $13 increase went to marketing agencies. Farmers received 38 percent of the retail cost of the foods bought by a typical urban family in 1961, compared with 39 percent in 1960.

Although the retail cost of this "market basket" of farm foods increased in 1961, the hours of labor required to pay for it did not change. A typical factory worker could pay for the market basket with his wage from 459 hours of labor in 1961, 5 hours less than in 1960. In 1947–49, the comparative hours totaled 707.

ERS completed an intensive study of pricing of class III milk in the New York-New Jersey marketing area in time to provide a substantial part of the evidence considered at a hearing on Federal Milk Marketing Order 27 in the summer of 1961. It may have a substantial bearing on the decisions on class III prices resulting from the hearing.



Progress toward more effective control of costs in poultry-processing plants has been hampered by a lack of uniformity in accounting systems. Research on costs in poultry-processing plants led to a guide to uniform cost and financial accounting which has been adopted and is now in use by a number of plants. This system will contribute to further reductions in margins for poultry processing, a trend which has figured importantly in increasing consumption and production of poultry meat.

A study of the Great Lakes-St. Lawrence Seaway shows that the seaway, in its first year of operation, reduced costs of grain movements to Europe, shifted the flow of grain toward lake ports, occasioned reductions in some rail rates, and adversely affected Atlantic grain ports. The future impacts of the seaway will depend on such factors as adjustments in rail rate structures and development of Great Lakes port facilities and services.

Research evaluations of the pilot food-stamp programs, developed from several coordinated surveys, furnished a basis for projecting program requirements, improving the effectiveness of the program, and evaluating its implications with respect to markets, agricultural and commercial distribution resources, farm prices and incomes, and nutritional levels among low-income families.

Researchers evaluated the effectiveness of promotional programs for apples and frozen concentrated orange juice. Compared with periods of no promotion, apple sales were 20 percent greater when promotion emphasized the various uses of apples, and 9 percent greater when it emphasized health and nutrition. Sales of frozen orange juice were about 13 percent greater with promotion than without it.

A research project completed in 1961 showed that new processed forms of potatoes have helped halt the decline in potato consumption and have provided additional income to growers. Dehydrated potatoes and frozen french fries have added an estimated 500 million pounds to annual potato consumption and $9 million to growers' incomes.

The use of fats in feeds, another study shows, has become a major new market for fats and oils, currently taking about 600 million pounds annually with good prospects for further growth. This has stabilized prices for tallow and greases, and helped offset the displacement of soap by synthetic materials.

A market test in cooperation with the Kansas Wheat Commission and the Kansas Association of Wheat Growers was carried out on Redi-wheat, a new cooked, convenient, whole-wheat food, to determine the potential of such new wheat products in increasing wheat consumption. Preliminary results indicate that Redi-wheat has commercial prospects.

The overall agricultural situation was analyzed throughout the year in monthly issues of *The Demand and Price Situation.* The impacts on the market for food and fiber of current and prospective trends in farm product prices, supplies, farm income, foreign developments and exports, and general economic conditions were appraised.

Longer run appraisals of prospective expansion in the demand for farm products, farm output, and supplies available for export were also prepared.

ERS analyzed the economic implications of proposed programs—such as the 1961 emergency feed grain program, long-range programs for feed grains and wheat, and alternative proposals for meeting the problem of large-scale imports of cotton textiles.

A new bulletin, *Demand and Prices for Meat*, analyzed trends in production, consumption, and price of the several meats and meat animals from 1921 to 1960. The outstanding phenomenon has been the rise in beef consumption relative to that of pork. The retail value of beef has increased percentagewise almost as rapidly as the real disposable income of consumers, while the retail value of pork has increased less than one-fifth as fast.

The *National Food Situation* regularly measured and analyzed food supplies and consumption.

Research directed toward maintaining and improving the accuracy of farm-income measures was continued.

The new concepts of a farm and of farm population used in recent Censuses of Agriculture and Population make necessary extensive revisions of statistics covering the number of farms, farm population, and per farm and per capita estimates of farm income.

The concept of parity income is being reexamined. A new approach, which would define parity income as the income which would yield returns to capital and labor engaged in agriculture equal to those earned by similar resources in the nonagricultural segment of the economy, is being studied.

A summary of five rural industrialization studies, done cooperatively with State experiment stations, points to some interesting conclusions. It shows, for example, that young male rural residents

643251—62——4

with nonfarm experience or professional training have a decided advantage in securing industrial employment; that potential level-of-living increases are greater for plant employees than for many other area residents; that plant employees who continue to farm increase their use of hired and unpaid family labor; and that many part-time farmers regard their agricultural activities as a supplemental source of income and expect to discontinue farming when their economic situation permits.

A study of the effects of rapid suburbanization upon the farm population in suburban fringe areas shows that highly intensive operations, such as dairy farms, hold out longer in the face of suburbanization than do more extensive farm enterprises, such as hay and grain, or tobacco farms. Older farm operators were found to be selling their holdings piecemeal for building lots in a gradual process of disinvestment, as age and the increasing cost of labor and taxes forced reductions in the size of their operations.

A special analysis of the medical expenditures of older farm families was prepared for use in conjunction with the 1961 White House Conference on Aging. It showed that older farm families spent a higher proportion of their net family income on medical expenditures and were less often covered by health insurance.

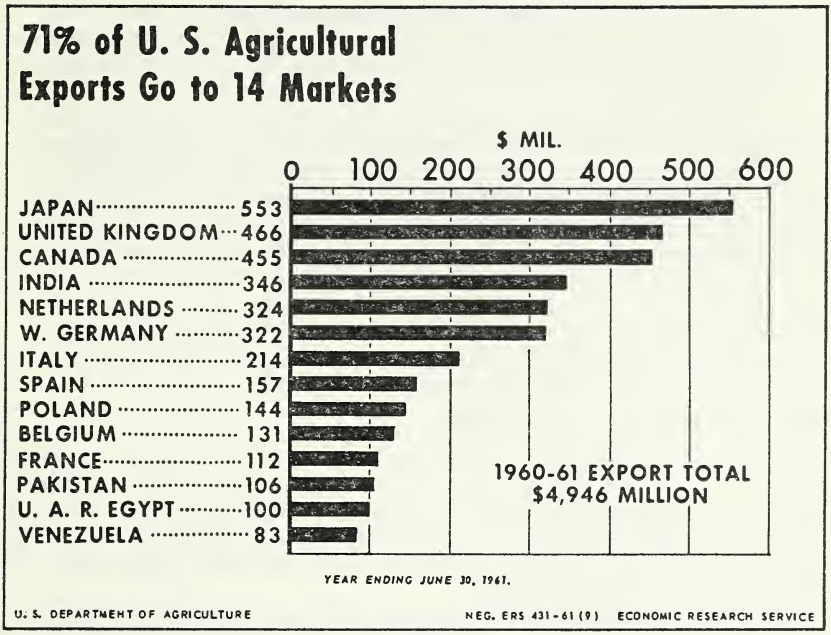
ERS continued to carry out research for a centennial history of the Department. The approaching centennial of the Department, the land-grant colleges, and the Homestead Act led to many calls upon the staff for data and assistance in developing commemorative material.

In other areas, the ERS, in cooperation with the Foreign Agricultural Service, devoted much effort during 1961 to an attempt to measure the food consumed by the people of the world in a base year (1958) and to make food-consumption projections for 1962 and 1966. These food-consumption levels were then compared with nutritional standards to measure their adequacy. The material was published in late fall 1961 as the "World Food Budget, 1962 and 1966."

The "Budget" provides a more precise measure of the extent and composition of world food shortages than previously has been available. It will be redone at selected time periods in the future and will serve to provide a factual basis which, together with related information, will enable the food-for-peace program and development-aid programs to be conducted more efficiently and effectively.

ERS also provided a great deal of economics research on the vital role played by the foreign market in U.S. agriculture. U.S. agriculture is more dependent on exports than is the rest of the Nation's economy. Part of the production of nearly every farm community goes abroad, and the Nation relies heavily on agriculture for export earnings. Thus, in recent years, the value of agricultural exports has averaged about 13 percent of cash receipts from farm marketings, while total exports from the United States represent only about 4 percent of the gross national product. Agricultural exports now make up about one-fourth of total U.S. exports.

While our agricultural exports in fiscal 1961 moved to more than 140 countries, 71 percent went to 14 of them. Japan was the No. 1 market in 1961, displacing the United Kingdom, which has been traditionally our best agricultural foreign market.



The level of gold and dollar holdings, which is one of the major indicators of the ability of foreign countries to buy U.S. products, is at or near a record high in advanced, industrial countries. In 1960 and 1961 foreign reserves continued to rise in a few industrial countries while a "dollar shortage" persisted in most of the underdeveloped countries where most of the world's population lives. In financially strong countries, expansion of agricultural exports will depend mainly on vigorous competition and market promotion efforts. In the dollar-short countries, the chief opportunity is in the food-for-peace program.

Much of the other material with respect to foreign trade dealt with by ERS is included in the Foreign Agricultural Service section of this annual report.

CONSERVING OUR NATURAL RESOURCES

Soil Conservation Service

Under favorable conditions, the use of conservation farming practices can be one way to beat the technological cost-price squeeze.

A farmer in the Garvin, Okla., Soil Conservation District, for example, converted his high-producing Washita bottomlands from row crops to grass.

For 10 years the principal crops on this 540-acre farm—one of the best bottomland farms in the county—had been alfalfa, small grain, corn, and grain sorghum. But ma-

chinery, labor, and moisture problems caused this farmer to try a new crop—Bermuda grass. He planted only 15 acres at first, but it worked out so well that he finally rounded out 100 acres.

When his Bermuda-grass pasture reached 86 acres, he grazed 89 to 110 mature cows and 66 calves on it. Finding himself with more grass than they could eat, he fenced off 30 acres, which produced 1,690 bales of excellent hay in 1960.

If he had kept this land in row crops, he'd have needed a new tractor. One tractor costs about the same as 20 cows. He gets a bigger return from grazing the 20 cows than he could have obtained from equivalent acres planted to row crops and harvested with the tractor. Besides, Bermuda grass is a soil builder that simultaneously prevents erosion and adds needed organic matter to the land.

1961 Developments and Trends

As the 1961 fiscal year ended, the Soil Conservation Service found itself in the most active and productive period in its history. Keener public awareness of soil- and water-conservation problems and needs combined with a stronger determination of responsible leaders—local, State, and Federal—to move ahead faster on the conservation job created an increasing challenge.

Between mid-May and mid-August of 1961, President Kennedy sent to Congress for approval work plans for 54 small watershed projects covering nearly 4 million acres, the largest number to go to Congress in a 90-day period since the program was authorized in 1954.

Farmers and ranchers formed 26 new soil conservation districts in fiscal 1961, which, with the division of some multiple-county districts into individual county districts, brought the total to an even 2,900. These districts include 96 percent of the Nation's farms and 92½ percent of its land in farms, in all 50 States, Puerto Rico, and the Virgin Islands—or nearly 1,038 billion acres and more than 3,560,000 farms and ranches. On January 17, 1961, Oklahoma joined 22 other States, Puerto Rico, and the Virgin Islands in being covered completely by soil conservation districts. More than 1.8 million farmers and ranchers, operating about 594 million acres, are cooperating actively with their districts.

SCS aid to the districts was stepped up in every way possible to speed the agricultural resource betterment that is so important to the Nation's economy and its future ability to produce an abundance of food and fiber. Technical aid was provided to 2,883 districts during the year. Land owners and operators were helped in developing 102,781 basic conservation plans on about 36,900,000 acres, bringing the total of such plans to 1,358,290 covering 405,898,414 acres. Another 28,467 plans on 15,215,000 acres were revised and brought up to date.

Soil surveys, basic to conservation farm and ranch planning and widely drawn upon by local planning and other interests, charted the characteristics of the country's lands at a record rate. Surveys were made on 55,750,872 acres during fiscal 1961, compared with 50,159,493 acres the preceding year, an increase of 11 percent. By June 30, 1961,

700,563,832 acres had been surveyed and mapped in enough detail for soil and water conservation planning of farms and ranches and small watershed projects. The mapped acreage represents 37 percent of the total land area of the country and 55 percent of the agricultural land in the soil conservation districts.

Requests for information about use of soil maps in urban planning and construction work continued to increase.

Information developed in the Department's cooperative national inventory of soil and water conservation needs began to be made available during the first half of 1961. Many counties and some States already had published their inventory data by the end of the fiscal year.

The sharply increased number of farmers and ranchers signing Great Plains conservation program cost-sharing contracts during the first 6 months of 1961 further reflected the healthy conservation progress of the Nation. Nearly 1,400 contracts were signed in that period, raising the total number of contracts from 5,586 to 6,968. Acreage covered rose from approximately 14,880,000 to about 18 million acres.

Each of the Nation's land-use and water-management programs has amply demonstrated its effectiveness in meeting particular needs, but, operating together toward a common purpose, they have a multiple impact.

Take, for example, the contribution of conservation programs to sound rural area development. Multiple-purpose watershed projects, because of their basic community organization and goals, are particularly well adapted to carrying out rural area development. So is the Great Plains Conservation Program in the hazardous climatic areas of that region. So are soil conservation districts, which first demonstrated the practicability and effectiveness of the rural community approach to land and water problems. Soil survey and conservation needs information can be, and already is, a basic tool for use in rural area planning and development.

Much land needing conservation treatment is no longer farmland. Conversion of open country to residential, industrial, and other urban uses leads to such complex problems as finding stable soils that will support structures, controlling floods and sedimentation, providing drainage and sewage disposal, and adjusting taxes. The same conservation programs and services that serve in rural areas are proving themselves in these nonagricultural situations.

The primary responsibility of the Soil Conservation Service is to assist the districts, but more recently SCS has been called on for more consultation concerning conservation problems on nonagricultural land. Today, the practice of soil and water conservation consists to an ever-increasing extent in applying new technology to keep land and water resources permanently productive and useful in rural and urban areas alike.

Watershed Protection and Flood Prevention

The Mountain Run Watershed in the Culpeper, Va., Soil Conservation District was presented the project-of-the-year award by the National Watershed Congress as the Nation's outstanding watershed development in 1961.

This project, sponsored by the district and the town of Culpeper through the Watershed Protection and Flood Prevention Act, features conservation treatment of farmland, three flood-prevention dams, and 6 miles of stream channel improvement.

One of the dams is a dual-purpose structure designed to store 190½ million gallons of water for the town, better than half a year's supply. For years, water shortages and annual flooding had been pinching off Culpeper's chances for community and industrial growth. Flood damages averaged $12,000 a year, and critical water shortages occurred almost annually.

Three new industries employing 400 people have set up branches in Culpeper—a result of the new plentiful water supply and protection against flooding. The town also has a new hospital, previously held up because of lack of water, and a new home development in the hospital area, made possible by the extension of water mains.

Roadbank erosion-control measures protect and beautify roads in the watershed. Recreational space for boating and fishing has expanded; and a 4-acre picnic area at one of the three new lakes will be the first park ever developed in Culpeper County.

Of the entire $545,000 cost of this combined rural area-urban watershed development project, the Federal Government contributed technical assistance and $168,000; the remaining $377,000 was provided locally.

As of December 1, 1961, the Department had received 1,605 applications for assistance under the Watershed Protection and Flood Prevention Act. They included nearly 113½ million acres. Meanwhile, 693 projects totaling almost 49 million acres had been authorized for planning, and 365 of those, comprising about 21 million acres, had been authorized for operations.

During the fiscal year, 239 floodwater-retarding structures were completed, and 117 more were under construction on June 30. The total structures completed by the yearend were 471. Channel improvement work was finished on 156 miles of stream channels during the year, for a total completed to date of 339 miles. Land treatment work progressed on all the small watersheds approved for structural work under Public Law 566.

Only 20 of the 62 pilot watershed protection projects originally approved for Federal assistance in 1953 remained to be completed at the end of fiscal 1961. Thirty-five projects had been completed and seven terminated with concurrence of the local sponsors.

Subwatershed work plans developed in flood prevention operations on the 11 major river watersheds authorized in the 1944 Flood Control Act brought the total subwatersheds and subwatershed areas planned to 313.

The SCS gave technical help to farmers and ranchers in 2,736 water-management group enterprises. The projects, involving improved irrigation, drainage, or other water management problems, benefited approximately 1,828,000 acres.

River basin investigations were started or continued on 14 major rivers, in cooperation with the States involved and with other Federal agencies concerned with water storage, flood control, or navigation.

Snow Surveys

Snow surveys were made by the SCS in cooperation with Federal, State, and local or private agencies on about 1,100 snow courses in 11 Western States, and snow survey data were exchanged with California and British Columbia. This information is invaluable in the preparation of special water-supply forecasts and water-saving tips for distribution to farmers and other irrigation interests, and in assigning priority to requests for assistance on work to improve irrigation efficiency. It enables water users and suppliers to adjust cropping systems and other plans to prospective water supplies.

Great Plains Conservation Program

Of the 422 counties authorized for participation in the Great Plains Conservation Program, 361 counties in the 10-State area had been designated for participation by June 30, 1961, an increase of 6 counties during the year. Besides the 6,947 cost-sharing contracts covering 18,082,351 acres that had been signed by farmers and ranchers as of June 30, 1961, there were on hand 2,927 applications covering an additional 9,145,000 acres.

Nearly 608,000 acres, over 28 percent of all the cropland on participants' farms or ranches, have been planned for conversion to permanent vegetation since the beginning of the program, most of it under program plans. In fiscal 1961, planned land-use conversion totaled 163,392 acres. The 88,496 acres of rangeland planned for reseeding during the fiscal year brought the total for this major practice to 557,447 acres since the start of the program. Other cost-sharing practices include terracing, stockwater ponds and wells, stripcropping, tree windbreaks, water spreading, and other measures needed for developing basic conservation plans.

Conservation-Needs Inventory

This valuable inventory indicates that soil erosion is still a dominant conservation problem on more than half of our cropland, and excess water is a problem on one-fifth of it. Total non-Federal cropland acreage is expected to decrease by at least 2 percent by 1975. Acreage of total pasture and range is expected to increase by about 3 percent, though forest and woodland acreage may decrease about 2 percent.

An annual shift of about 1⅓ million acres of agricultural land to nonagricultural uses may be anticipated in the 15-plus years from the time of the inventory to 1975—a total of at least 20 million acres.

Of approximately 13,000 small watersheds on the U.S. mainland delineated by the inventory, about 8,300 need project action on water-management problems that individuals are not able to handle. These projects would take in more than a billion acres, or half the land area of the United States.

Other Programs

SCS helped Agricultural Conservation Program participants on approximately 314,000 farms and ranches with permanent-type, cost-sharing practices during the 1960 program year; gave technical assist-

ance to 885 participants in the conservation reserve program; and aided the Farmers Home Administration in its conservation and watershed lending program.

Forest Service

"Renewal as well as change" keynoted activities of the Forest Service for 1961. The aim was to build and develop the basic natural resources needed by a fast-growing population now and in the future—outdoor recreation, range, timber, water, wildlife, and fish.

The more than 100 million recreation visits to our 155 national forests in 1961 illustrated the continuing American zest for outdoor rest and play. For the first time these visits passed 100 million, the previous high being 92½ million in 1960.

New facilities and improved care and cleanup under Operation Outdoors contributed to visitor enjoyment and safety. Yet, while a good job of policing, cleanup, and maintenance was done on 5,600 developed recreation sites, and many old, wornout facilities were replaced and some new ones added, overcrowding continued at many sites. There is an urgent need to expand these public use facilities.

The national forest timber harvest in fiscal 1961 totaled 8.4 billion board feet and was valued at $124 million. This cut, second only to the record high 9.3 billion board feet of the previous year, reflected a temporarily depressed lumber market during most of the period.

The allowable annual cut of timber—the quantity that can safely be harvested without depleting resources—is now estimated at 11.2 billion board feet. This is a sharp increase over a few years ago. In 1954, for example, the allowable annual cut was only 6.9 billion board feet. This is due mainly to better utilization practices, improved accessibility to stands of timber, and increased timber stocking as a result of better forest protection and reforestation and timber stand improvement work. Much of the increase in allowable cut is in convertible forest products such as pulpwood, manufactured from trees below sawlog size or sawlog quality. In fiscal 1961, 158,351 acres were planted and seeded—an increase of 24,094 acres over 1960—the largest area reforested in any year since 1936. To meet the needs of expanding reforestation programs, three new tree nurseries are being constructed and five operating nurseries are being enlarged. To increase timber growth and improve quality, 525,092 acres of young timber stands in poor growing condition were thinned, released, pruned, or given other silvicultural treatments.

We launched, during the year, a development program for the national forests. This major program covers the resource management and buildup needed on national forests and national grasslands to assure their ability to meet their full share of the Nation's present and future requirements. A national forestry research program was also developed to outline the research needed to support adequate forestry on both public and private lands, giving special attention to farms and other small private woodlands.

The potential for new industry in a depressed area received a boost when the Forest Service issued prospecting permits for iron ore in the No-business, Dismal, and Mill Creek drainages of the Jeffer-

son National Forest, Va. Under the auspices of the Virginia Polytechnic Institute, a new process of preparing iron ore concentrates of commercial grade from iron-bearing sandstone in western Virginia has been developed. If successful, this process will mean a new industry, with a large investment in processing plant and facilities and a heavy payroll, that will stimulate the economy of much of southwestern Virginia. Safeguards have been provided to the watershed, recreational, wildlife, and other land values of the area, including restoration of disturbed areas.

Permission was granted to strip-mine several barium sulfate deposits in the Missouri National Forest. These deposits, too, are in economically depressed areas, and new jobs may result.

Improving the range.—The millionth acre of national forest land was revegetated in 1961. The 143,631 acres revegetated during the year brought the total to 1,012,156 acres.

Wildlife improvement.—On March 5, 1961, we announced National Forest Wildlife, Part II of Operation Outdoors, a 15-year program to improve wildlife habitat to meet the growing public need for hunting and fishing facilities. Some 25 million visits were made to national forests for hunting and fishing in 1961—about 3 million visits more than in 1960 and three times the number in 1950.

Forest fires on national forests—largely in the West—were unusually severe for the second consecutive year. This was due to accumulated drought and more than the usual number of lightning storms. By the end of August, the number of fires and the cost of suppressing them had already exceeded the previous year's record. Vigilance and improved firefighting, however, kept the total acres burned much lower than at the same time the year before.

Thus, in 1960, by the end of August, 9,295 fires had burned 368,000 acres; in 1961, 13,000 fires had burned only 210,000 acres. Hundreds of fires were caught and put out while still small. The last week in August saw more than 6,000 men on firelines in Montana, Idaho, Oregon, and California.

The Winema National Forest was established, mainly from former Klamath Indian lands (525,000 acres) in southeast Oregon purchased by the Federal Government. It brought the total of such forests to 155.

Fire damage caused many restoration problems in *watershed management* work in western national forests. To cope with these problems, some 370 miles of bulldozer-built fire lanes were cross-ditched and stabilized. Physical structures—gully plugs and control terraces—supplemented with tree planting and grass seeding, were installed on about 70,000 acres of burned-over watershed lands to prevent further on-site deterioration and downstream damage.

Engineering, land exchange, and rights-of-way play vital roles in modern management of national forests and national grasslands. Thus, engineering skills are used in designing structures, building roads, and evaluating water storage and power developments. Land is continuously exchanged to fill out boundaries or otherwise improve management. Rights-of-way over private lands must be obtained for access to national forest lands, and land surveying and mapping must be kept current.

643251—62——5

Twenty hydroelectric projects proposed for permit, license, or amendment of license were investigated for possible impact on national forest management. Thirty-four exchanges of land were consummated. And about 600 rights-of-way were purchased, compared with 468 in 1960.

In reestablishing and marking national forest boundaries, an estimated 820,000 corners must be verified and ultimately monumented, and some 208,000 miles of property lines marked. During fiscal 1961, 12,758 corners were searched, 8,947 verified, and 3,719 monumented, while 425 miles of boundary lines were marked.

The map coverage required in managing these public lands includes an area of 786,655 square miles. As of June 30, 1961, 420,195 square miles of planimetric mapping had been completed, with 54,560 square miles of it done in fiscal 1961. Topographic mapping by the U.S. Geological Survey and the Forest Service on national forest lands now covers 267,256 square miles, about 35 percent of the needed coverage.

On March 11, 1961, we observed a milestone in national forest history—the 50th anniversary of the Weeks law, named for its author, John W. Weeks. Forty-eight eastern national forests—comprising 20 million acres—originated through this law, which provided for purchase of lands for national forests and laid the groundwork for Federal-State cooperation in forestry. During the year appropriate ceremonies marked the anniversary.

Cooperative State and Private Forestry

Tree planting on all private lands was slightly below the 1960 level according to preliminary reports but should reach new records in 1962. Revival of the program of assistance to States by a revision of the budget after January 20, 1961, and the subsequent appropriation of $1 million will boost private land tree planting. The States have indicated a need for more money to match the expenditures they are prepared to make for this activity in 1962.

Despite mounting use of forests by the general public, progress is being made in *cooperative fire control.* Slowly the acreage burned each year is being reduced. But an average of about 100,000 forest fires per year on all lands is still far too high. Prevention is the answer to the fire problem, and new approaches to prevention are being studied. Ninety-seven percent of forest fires are man-caused and therefore preventable.

In 1961, 48 States cooperated in this program, with 403 million acres under some degree of organized protection. Still without organized protection are 32 million acres, and on these acres a larger area is burned annually than on all of the 403 million under protection. Ultimately Alaska will add another 100 million acres needing fire protection. The Federal Government spent $9.4 million in this activity in fiscal 1960 and the States $56.6 million.

Technical assistance in woodland management is provided to owners of small forests through 452 assistance projects in 46 States and Puerto Rico. In 1961, 82,188 woodland owners received help involving 4,115,612 acres. The Federal Government contributed $1,370,459 and the States $2,488,411 to this program.

The never-ending battle against forest pests continued. The most dramatic success in this battle has stemmed from the use of antibiotic drugs—fungicides—to cure blister rust, a disease extremely damaging to white pine. All indications are that these "wonder drugs" will now save millions of board feet of valuable western white pine. Cycloheximide, known as actidione, was applied by hand spray this year to 12 million infected trees at a cost of 8 cents per tree. Without this treatment they would have died. Another antibiotic fungicide, phytoactin, was applied by aerial spray to 28,000 acres of infected white pine, at a cost of $10 per acre. The new treatment can be applied at less than half the cost of the former control method.

Seven flood prevention projects were continued under the Flood Control Act of 1944. Some 48 million trees were planted on 53,000 acres of eroding and flood-producing lands. To 5,567 landowners, technical help was extended to aid in flood prevention. Other flood control work was done under Public Law 566. Under the Flood Control Act of 1950, 10 watersheds involving 40,000 acres, mainly national forest lands in southern California, received emergency treatment for watersheds impaired by fires.

Small family forests, millions of them across the country, need to be producing more than they are now, to benefit owners and help supply the forest resources an enlarging nation must have.

Research—Vanguard to Forestry Progress

Since *Forest Service research* extends to nearly every phase of forestry, wood use, and rangeland problems, only a minute part of it can be touched on here. Results are made known to the public through numerous publications, news releases, scientific papers, public patents, and direct contact. Thus both public and private forests benefit. The following items are merely illustrative.

New research installations were started at 16 locations. These included a forest-fire research laboratory at Riverside, Calif.; a new headquarters building for the Lake States Forest Experiment Station at St. Paul, Minn.; a watershed and hydrology laboratory at Wenatchee, Wash.; a research structure for insect, disease, utilization, and forest management studies at Athens, Ga.; a laboratory building at Fairbanks, Alaska; and an office-laboratory for marketing and utilization research at Princeton, W. Va.

Because of shallow soils, steep slopes, and low summer rainfall, large unproductive areas in the ponderosa pine region of the West have up to now defied successful planting. A 5-year study in central Idaho embracing 450 acres of plantations now indicates that this problem can be overcome by combined site preparation (stripping and trenching with bulldozer and plow) and special stock handling and planting techniques. This pilot-size experiment, by developing a successful planting method, has stimulated renewed effort throughout the ponderosa pine region in places where planting had largely been given up as a reforestation method.

A great potential in preventing timber losses from insects was uncovered this year when *Bacillus thuringiensis*, an organism known to be effective against many insects, was isolated from the western white pine and Engelmann spruce beetles. The organism is being studied to determine its effectiveness in control.

Studies at the Forest Products Laboratory show that *wood losses due to sawdust* can be reduced by thick sliced veneers. Developmental work has been completed for several species, and thick veneers up to one-half inch have been sliced successfully and their utility evaluated. This technique shows enough promise that manufacturers of wood-processing machinery have become interested and possibilities of joint sponsorship in design and production of a commercial machine are being explored.

Recreation research.—At Warren, Pa., case studies just completed of nine highly developed forest recreation areas in New York, New Hampshire, and Pennsylvania show the most pressing problems to be financing, overuse, and sanitation. A similar study, including use load, is being made for some 75 developed camping and picnicking sites on three southeastern national forests. Other studies are well underway to devise methods to obtain accurate estimates of recreation use: in California for developed areas; in Oregon for the amount and character of use in wilderness areas; in the Minnesota boundary waters canoe area for the amount of use and characteristics of users; and in Virginia on the amount and nature of use in undeveloped forest land.

In measuring timber, greater precision is needed to meet the increasing demands of scientific forest management. To service this need, a pioneering basic research unit was set up to explore forest mensuration (the science of measuring). This new unit, assigned to the Pacific Southwest Forest and Range Experiment Station, at Berkeley, Calif., will probe fundamental mathematical theory relating to size class dispersion and enlarge our knowledge of mensuration laws and principles.

Lumbermen may soon be measuring lumber volume by weighing truckloads of logs instead of scaling by conventional rules. Research has shown that weighing can give good estimates of lumber yield, and is often a more equitable basis for purchase and sale. It also saves time and money.

Administration

As the Forest Service girded itself to meet bigger demands on resources and heavier, more complex workloads in all activities, we directed much attention to administrative needs.

While about 650 professional people were recruited for forestry, range conservation, wildlife biology, engineering, landscape architecture, public and business administration and biological and physical research sciences, greater emphasis was also placed on the full development and best use of employees—the all-important human resource.

To facilitate program accomplishment, more administrative functions were decentralized to forest and ranger district levels. To increase production by professional manpower and provide better data faster, automatic data-processing techniques were applied to additional fiscal and program work.

The Internal Audit Unit, set up in 1958, had by 1960 audited all major installations. In 1961 many installations received the second audit, performed to more intensive standards than the first.

Overall it was a year of new beginnings toward better services for the American people—through greater benefits from *national forests*, through improved services to *States and private forestry*, through *research* which undergirds all forestry progress. It was renewal for new times, change to meet the changing conditions of a fast-growing nation.

STRENGTHENING RURAL AMERICA

Rural families face great adjustment problems in a rapidly changing economy and society. The Cooperative Extension Service is helping families make these adjustments as smoothly and quickly as possible.

Cooperative Agricultural Extension Service

The dominating note in the current work of the Cooperative Extension Service is the total development of rural America's human and physical resources. Essential to this endeavor is an improved public understanding of agriculture's contribution to U.S. society.

> In the spring and summer of 1961, Extension stepped up its work in this field by launching a special nationwide series of 15 direct mailings by State extension workers to 100,000 "opinion leaders"—newspaper editors, radio and TV station managers, bankers, local businessmen, and other groups. The mailings, consisting of letters and leaflets, told the "agriculture story."
>
> State and county Extension workers also increased their use of newspapers, magazines, radio, television, exhibits, and other mass methods to tell the success story of U.S. agriculture to the general public.

Extension carries out both extensive and intensive educational programs in agriculture, home economics, 4–H, and related fields through a partnership with the U.S. Department of Agriculture, State land-grant colleges and universities, county governments, and local people. The Federal Extension Service has the overall responsibility for coordinating the educational work of the Department and providing national leadership for the cooperative Extension effort.

During calendar year 1960, county extension workers assisted more than 15,600,000 families in adopting better farming and homemaking practices and in carrying out community development projects. This was a 17-percent increase over 1959. A further increase occurred in calendar year 1961.

Educational Help on Adjustment Programs

Working closely with State and county agricultural stabilization and conservation committees on the 1961 feed grain program, the 1962 wheat program, and the 1962 feed grain program, Extension centered its efforts on helping acquaint producers with the objectives and provisions of these programs and on assisting individual farmers to analyze the programs in relation to their own operations. In explaining the program to producers, Extension made wide use of mass media and meetings. Different types of budget formats, developed

by the Federal Extension Service, helped individual farmers figure out the benefits they would derive by participating in the 1961 feed grain program. The budget formats were used generally by the States in their educational efforts.

The administrative cooperation of State ASC committees and State extension services in the 1961 feed grain program was continued both in the 1962 feed grain program and in promoting understanding of the Agricultural Act of 1961.

Rural Areas Development Program

We have given Extension organizational and educational responsibility for the Rural Areas Development Program (RAD) as well as for such rural phases of the Area Redevelopment Program as are assigned to Agriculture.

During 1961 State RAD committees were formed in nearly all of the States—either entirely new groups or reorganizations of committees set up under the pilot county Rural Development Program. The organization of county and area committees also proceeded rapidly. Some States, Georgia for example, are now organized in every county.

Procedural guidelines developed by the Federal Extension Service were discussed with the States in regional conferences and information materials were prepared to help get the program launched.

Specially trained teams of Federal Extension Service staff members aided State extension services in forwarding the organizational and educational phases of RAD.

Work With Co-ops Increasing

State extension services in 1960 provided educational assistance to 5,907 formally organized cooperatives, an increase of 447 over the previous year. In view of our reaffirmation of the 1952 statement of policy that the Department has a positive responsibility to farmer cooperatives, an even larger increase was expected in 1961.

Illustrating the advantages of this service is the experience of milk producers in a Florida area.

Aided by an Extension educational program in appraising alternative market outlets and procedures, they purchased three processing and distribution plants. Their co-op reports that, "Based on cost and returns of other dairy co-op and non-co-op plants in the State, the 40 producers should realize an additional $200,000 per year in net returns for their milk."

Livestock Improvement

Educational programs on the value of performance testing to improve the economic traits in livestock are obviously getting results. A survey conducted by the Federal Extension Service disclosed the following producer participation:

Beef cattle: 3,964 herds representing 304,672 brood cows were enrolled in Extension-sponsored "on-the-farm" performance-testing programs. Postweaning rate-of-gain records were secured on 1,537 bulls in 29 testing stations and on 10,935 bulls fed on the owners' farms and ranches.

Swine: Extension services in 23 States assisted hog producers with on-the-farm litter-testing programs. Thirty-nine swine-testing sta-

tions with an annual capacity of 10,500 pigs were in operation to secure carcass evaluation, rate of gain, and feed-conversion data on animals consigned by breeders.

Extension is now emphasizing teaching farmers how to interpret this information to improve the efficiency of their herds.

Accelerating the Use of Research

One of Extension's fundamental tasks is to carry research from the laboratory to the farm, and the food industry, as quickly and effectively as possible. Information on new processing methods, improved equipment, and new processed products can be vitally important to the food, textile, and forestry industries.

For example, the frozen-food industry, seeking to maintain high quality in its products through all channels of distribution, has embarked on an all-industry educational program with the help of the Federal and various extension services.

The educational program grew out of time-temperature-tolerance research work conducted by the Department, with information based on results of the research widely disseminated by Extension.

Frozen-food industry groups in several States have arranged with State extension services for short courses and training conferences. Based on current progress, this educational program may be underway in most of the States within the next year or two.

New processes for potatoes—potato flakes, chips, granules, and various other new products—help increase the use of potatoes by consumers. In the first 6 months of 1961, one of Federal Extension Service's utilization specialists personally provided technological information to several potato processors and to two new prospective processing groups that will help them either to adopt new processing methods or improve the quality of their product.

4–H

During 1961, Extension worked with about 2.3 million members of approximately 95,000 organized 4–H Clubs. Of these young people, 10 to 21 years of age, 53 percent came from farm homes, 28 percent from rural nonfarm homes, and 19 percent from urban homes. Members were enrolled in projects in various areas of farming, homemaking, and related fields.

More and more 4–H'ers are indicating a growing interest in the underlying principles of science. A $47,000 grant from the National Science Foundation to the National 4–H Club Foundation is being used to study the possibilities of expanding the understanding and use of science through 4–H Club work. The project is expected to be completed by the fall of 1962.

Good health is an essential part of 4–H training. During calendar 1960 over 336,000 members had health examinations as a direct result of participation in 4–H programs; 260,000 members attended 4–H Club camps and a total of 769,000 members received definite training in health and corresponding endeavors. The improvement of teenage nutrition is being given continuing emphasis. All these activities were carried on at an expanded rate in 1961.

Citizenship training of 4–H'ers has also been intensified. At the National 4–H Conference in Washington during the spring of 1961,

200 outstanding 4–H members explored citizenship responsibilities on the basis of surveys they had made in their home communities. Throughout the year many other State and county 4–H delegates came to Washington for a week's program of citizenship training, including discussions at the National 4–H Center, firsthand observations of government, and meeting their own Congressmen.

Training in Farm Management

To help meet the rising managerial requirement of modern-day farming, Extension made heavy use of workshops, or farm-management schools, where intensive training could be given to farm people in small groups.

Farm business training for young couples just starting out has become an important feature of this work in many States. Missouri, for example, scheduled 80 such schools in 80 counties in 1961.

Through publications, newsletters, and other means, information was extended to farmers concerning contracts, incorporation, operating agreements, property transfer, and various business transactions.

Commercial bankers and other lenders face a growing problem of keeping up-to-date on farm organization and farm management. In California during 1961, 10 or more farm-management short courses were held for commercial bankers. The course consists of six meetings of 2 hours each, timed 1 week apart for 6 weeks, together with a day's field trip to five types of farms important in the area.

Public Affairs

Since farmers and other rural people are increasingly concerned about public affairs, State and county extension workers help them to get the facts and arrange for group education and discussion meetings.

More than 40,000 persons in Arkansas took part during May 1961 in a statewide public discussion program. Meeting in "discuss-it-yourself" groups, they took up questions of economic growth, social improvement, farm and small business problems, and concerns of families and communities.

The Arkansas Extension Service conducted the program, known as the "Arkansas Future Series," and developed the discussion fact kits while county extension workers organized the discussions locally.

New York's Operation Advance deals with public problems in that State. Beginning in April 1961, over 800 key community leaders held self-administered discussion groups in 5 counties to improve their competence in dealing with significant public problems. They analyzed State and local finance, roads for the future, outlook for local government, and economic development.

The program was sponsored by the Cooperative Extension Service of the New York State Colleges of Agriculture and Home Economics and County Extension Service Associations, with the assistance of other colleges of Cornell University. County extension agents provided local leadership.

Because of the success of the program in the five counties, it was extended to other areas in the State in the fall of 1961.

Home Demonstration Work

Over 7,500,000 families were assisted by county home demonstration agents in meal planning, food preparation, food storage, and in improving diets in 1960, an increase of nearly 1,900,000 over the previous year. With the growing public awareness of good nutrition, it is likely that in 1961 even more families received this type of educational help. Extension is paying particular attention to the nutritional education of teenage girls who, it is well known, are likely to skimp on their diets.

During 1960 over 1,900,000 different homemakers and others were aided in home management, an increase of 136,000 over the previous year.

The rapidly growing population has given a big impetus to Extension work in the area of family life. During 1960 over 2 million different families were assisted directly or indirectly in phases of family living ranging from child development and guidance to home and family recreation. The increase over 1959 was more than 200,000. We expect that this work also showed a steady gain in 1961.

Rural Areas Development Program

Underemployment in rural America, and, as a result, low income, is a serious problem. In 1959, more than 75 percent of all farm families had incomes under $5,000. The full resources of the Department of Agriculture must be directed toward the elimination of this serious low-income, underemployment problem.

Beginning in 1961 the Department has moved rapidly to mobilize its resources and personnel for a total program of rural areas development. This activity, I believe, can be more important to the long-range future of our Nation than any other program now being conducted by the Department.

In the few months the new RAD program has been in operation throughout the Nation, highlights of progress include:

Establishment of a top-level Department of Agriculture RAD Board and staff to get the program into operation.

Organization of State and local RAD activities, with Farmers Home Administration, Rural Electrification Administration, and Federal Extension Service assigned the full-time job of helping local groups get underway.

Naming of 503 rural counties as eligible for financial aid under the new Area Redevelopment Act and direct USDA assistance to leaders in making use of ARA to strengthen their economies.

Stepping up rural electrification, farm credit, and small watershed work of the Department to make even greater resources available for rural development. Of particular importance is more imaginative use of REA section 5 loans to finance machinery in rural industries.

The task of rural areas development is national in scope. Last year, if underemployment in the Nation's farm regions were converted

643251—62——6

into terms of unemployment, there would have been more than 1 million persons in rural America unemployed.

We have given three agencies key roles in the RAD program.

Farmers Home Administration is responsible for establishing RAD panels to supply State and local leaders with technical aid in promoting new enterprises.

Federal Extension Service is responsible for providing organizational and educational leadership to State and local RAD committees. These include civic leaders, farm and business representatives, rural electric borrowers, State development agencies, trade-union representatives, and all other interested groups.

Rural Electrification Administration has the job of stimulating new business and other enterprises to build employment in rural areas.

Drawing on a broad background of work with farm and other rural people, each of these key USDA agencies has rapidly geared up for its RAD assignments.

Other USDA agencies represented on the Department's RAD Board have also acted to strengthen and step up those programs that promote area development.

This rapid action on the part of the Department of Agriculture has resulted in RAD program organizations in 38 States, with local program districts of 2 or more rural counties already organized in 25 States.

While the Area Redevelopment Act places basic responsibility in the hands of the Secretary of Commerce, the USDA, under authority delegated by Commerce, has responsibilities in rural redevelopment. These include helping eligible rural counties obtain Federal loans and grants for public works and industrial development, technical aid, and retraining of workers, including farmers and farmworkers. It involves selecting rural counties to receive assistance; reviewing area plans for development; and, most important, helping local leaders put together plans and projects that will take full advantage of the new ARA program.

Moving rapidly to carry out our responsibilities for area redevelopment aid, we had, by December 1961, reviewed and approved 112 overall economic development plans covering 370 counties in 27 States.

Thirty-six of these plans, including 64 counties in 14 States, also had been provisionally approved by the Department of Commerce.

Among project proposals approved by both departments are a waterworks project at Gassville, Ark., and a water and sewage system at Mountain City, Tenn.

In early October, five other project proposals in four States had been approved by USDA and were being reviewed in Commerce.

New job opportunities are being opened with REA's first two rural-areas development loans under its broadened policy on the consumer-financing provision of the Rural Electrification Act of 1936.

The first loan, for $25,000, to a rural electric co-op in North Dakota, which will finance the purchase of electrically operated gravel-crushing machinery, will provide jobs for 10 additional persons.

Two loans, for $250,000 and $30,000, to a Minnesota electric cooperative will provide employment for 204 full-time and 75 additional part-time jobs.

Of great importance in RAD is the new housing program of Farmers Home Administration, authorizing a total of $430 million in loans over a 4-year period to build and improve housing of farmers and others in open-country areas and small towns of less than 2,500 population.

Rural housing loans will improve rural living, put more carpenters, plumbers, and electricians to work, and increase sales in lumber and building-supply firms.

The achievement of full prosperity in America's rural areas is a key factor in the world contest with communism. In the rural areas development program we have the weapon to wipe away the chronic depression which now enchains many areas. It can lift the curse of underemployment which saps the strength of our rural economy in every area and it takes the first step toward the permanent prosperity of the rural community.

Farmer Cooperative Service

The Farmer Cooperative Service concentrated on helping farmers improve their economic position by:

Helping train and develop cooperative directors and key employees into competent business executives.

Furnishing information and guidance for farmers who are moving their cooperatives into the complex business activities associated with economic integration.

Making studies and giving specific advice on how and when to merge or consolidate cooperatives for more efficient operations and increased bargaining power.

Analyzing basic features of cooperative structure and operating methods to help cooperatives keep down costs, develop better marketing methods, and find more efficient methods for distributing supplies.

Working with cooperative leaders on improving communications with members, employees, and the general public.

Providing technical assistance on cooperative phases of the Rural Areas Development Program.

Continuing to help trainees and other representatives from foreign countries in their study of farmer cooperatives in the United States.

In its work to develop *better management*, the Service participated with the farmer directors and employees of cooperatives in meetings, training courses, and workshops throughout the country—usually in conjunction with universities, State councils of cooperatives, banks for cooperatives, State extension services, and so forth.

The Service distributed basic publications to help improve management as well as new studies providing information on management accounting for frozen-food locker and related processing plants, and on the duties of director committees.

A newly completed study of transportation factors involved in operating a feed mill at New Albany, Miss., should prove helpful to farmers in the 21 Mississippi counties served by the mill. Twelve

of these counties are in the Rural Areas Development Program. Another study now underway analyzes the feed potential for three new mills of the Mississippi Federated Cooperatives (AAL), Jackson.

Special studies made during fiscal 1961 provide background information to cooperatives on the advantages, difficulties, and results they might expect from expansion and *economic integration*. The Service is now completing a study, similar to those previously made for petroleum and dairy cooperatives, measuring the extent of manufacturing and processing in feed handled by cooperatives.

By assembling facts and analyzing them FCS helps cooperative leaders make decisions concerning consolidating operations or merging.

A 1961 merger of four dairy cooperatives serving over 3,000 Kentucky and Indiana farmers resulted in part from FCS data and assistance in planning the type of organization needed.

A major FCS study of value to the Florida citrus industry is detailed in a 1961 report, "Coordinated Marketing for Florida Fresh Citrus Shippers."

Research to help cooperatives *operate more efficiently*, reduce costs, and improve services to farmers continued. A study, in cooperation with the Virginia Department of Agriculture and Immigration, is helping growers and shippers take steps to improve grading and quality standards with a view to expanding their markets and developing new products.

FCS helped 32 cooperative cottonseed and soybean oil mills in developing an export marketing plan, and conducted a series of studies of 23 cooperatives to find a yardstick for cooperatives to use in measuring the efficiency of egghandling operations. Recent studies of the causes of livestock losses during shipment have been widely used by cooperatives and the livestock and transportation industries to improve handling methods, thereby reducing losses.

Open account credit, unless effectively controlled, ties up a cooperative's working capital and increases its operating costs. In cooperation with the Farm Credit Administration, FCS is studying ways in which Production Credit Association funds can be used to finance patrons' cooperative purchases.

To improve *communications* more than 250 employees of regional and local cooperatives attended three regional member relations conferences, cosponsored by Farmer Cooperative Service.

In cooperation with Pennsylvania State University, FCS completed a study on communication processes in a cooperative, pinpointing weak spots in operations and offering suggestions for improvements.

Actively cooperating in the revitalized *Rural Areas Development Program*, FCS provided research and assistance on marketing forest products cooperatively, and in problems relating to local processing of livestock, fruits and vegetables, and other products.

Underway is a survey of cooperatives in RAD areas that will reveal how local people now use cooperatives, as well as the possibilities for further cooperative effort.

FCS helped plan programs for 560 trainees from 75 *foreign* countries participating in the Technical Assistance Program.

The agency helped develop the cooperative segment of the U.S. exhibit at the Cairo World Agricultural Fair, assisted with the exhibit in Egypt, and conducted seminars for cooperative leaders there. Staff members also served as consultants on cooperative matters in Turkey, the Congo, and in New Caledonia.

An important phase of FCS work is the issuance of the *annual statistical report* on numbers, memberships, and business volumes of cooperatives. The results of this survey are used extensively by cooperative management in providing members and employees with current information on the progress of cooperatives in marketing farm products and handling farm supplies for farmers.

MARKETING OUR ABUNDANCE

Agricultural Marketing Service

The retail value of agricultural production in the United States amounts to around $100 billion a year. It is the primary source of income for 5.5 million of the civilian labor force employed in agriculture and for 10 million more in private industry who transport, process, store, and sell farm products. It is the channel through which all of our 185 million citizens are supplied their food, most of their clothing, and many of the other materials they require.

The work of the Department of Agriculture, specifically of the Agricultural Marketing Service, in this area falls into five major categories:

1. To help farmers get equitable prices for their commodities.
2. To increase the efficiency of distribution and lower costs by improving marketing facilities and techniques.
3. To help assure the quality of products consumers want.
4. To prevent unfair trading practices.
5. To help carry out a wise sharing of the Nation's agricultural abundance at home and abroad.

We made special efforts in 1961 both to carry out these functions and to coordinate more fully the Federal Government's marketing activities with the work of the States and private industry for the benefit of farmers and the entire public.

A reorganization of the Agricultural Marketing Service recognized the need for strengthening and improving the work of this agency to meet the needs of the changing market structure in our dynamic economy. This reorganization (1) placed greater emphasis on service and regulatory functions, and (2) made possible a greater concentration on marketing research to measure and maintain quality and improve facilities for handling farm commodities in the marketing process.

Food-distribution programs were greatly expanded to provide more food for more people—in needy families, in schools, and in institutions. A food-stamp plan was initiated in eight pilot projects to determine the feasibility of such a plan on a more extensive basis.

Inspection, Grading, and Classing

Inspection and grading programs of the Agricultural Marketing Service continued to expand, as farmers, tradesmen, and consumers expressed greater interest in these services. Special innovations included a demonstrational program of dual grading of beef carcasses, and the development of the first program of packaging and labeling Cheddar cheese with USDA consumer grades.

Widespread demand for grade-labeled poultry led to large increases in the volume of poultry grading. About 2½ billion pounds of chickens were graded in the 12 months ended June 30, 1961, an increase of 32 percent over the previous year; 960 million pounds of turkeys were graded, an increase of 19 percent.

About 5.5 billion pounds of poultry were certified as wholesome under the Poultry Products Inspection Act—more than 80 percent of all poultry sold off farms. At the end of fiscal 1961, Federal inspection service was being provided to 871 poultry-processing plants.

Dairy products inspected and graded in 1961 totaled 3,114 million pounds, an increase of about 800 million pounds over the previous year. The total included grading of 1,106 million pounds of butter, 54 million pounds of cheese, and 1,847 million pounds of nonfat dry milk—and inspection of smaller quantities of evaporated milk and other dairy products.

With the adoption by one plant of USDA grades and compliance with processing and packaging standards, we had in 1961 the first grade labeling of consumer packages of Cheddar cheese.

About 200 million pounds of consumer-packaged butter were grade labeled.

Inspection of fresh and processed fruits and vegetables provides a vital service to this mass buying and selling industry. Federal inspection, offered on a fee basis, reduces the risks involved in long-distance trading.

Because of a sharp increase in the inspection of frozen fruits and vegetables, the volume of processed products inspected in 1961 increased substantially. The volume of fresh products inspected rose slightly. The shift by large buyers to purchasing on acceptance on arrival caused some reduction in inspection work at shipping points and receiving markets.

Industry inquiries about continuous inspection operations on fresh products indicate that we may expect an increase in this type of work. Three continuous inspection programs already are in operation—two at shipping points and one at a terminal market.

Inspection of grains under the United States Grain Standards Act increased 18 percent over 1960, rising to an alltime high of 3.6 million inspections.

A major activity on livestock programs in 1961 was the further development and demonstration of a dual-grading system for beef carcasses and slaughter cattle. The system provides separate identification of differences in quality of the meat and in the yield of trimmed retail cuts from a carcass. Preliminary analyses of available measurement and cutting data indicate that similar principles would apply in identifying yields of cuts from lamb carcasses.

Classing of cotton under the Smith-Doxey Act increased for the eighth consecutive year to a new record high of 96 percent of total ginnings. This means that practically every cotton farmer now receives quality information as a basis for marketing his crop.

All of the tobacco sold in 1961 on the 177 auction markets in the United States—nearly 2 billion pounds—was federally inspected. Tobacco ranks fourth among all crops in cash farm income and is the leading money crop in several States.

Services on naval stores included inspection and grading of a total equivalent to 262,000 drums of rosin, and inspection and certification of 3.6 million gallons of turpentine.

Market News

A Valdosta, Ga., grower of flue-cured tobacco said:

> I have been growing tobacco 27 years and the inspection service tells me the exact quality of each lot of tobacco that I have for sale. I check the auction prices quoted in the market news service to see if the price I am getting is in line with the market average. I follow these market reports closely in selling my tobacco.

Federal and Federal-State market news services covering major agricultural commodities are continuously examined to determine whether they meet changing industry and marketing needs.

The dairy and poultry market news service inaugurated many changes in market reporting as a result of nine regional conferences with producers, processors, distributors, and retailers. It expanded its coverage of weekly movement of butter and eggs into retail channels and of weekly cold-storage movement in selected cities. By working closely with commercial news media in disseminating market news, the need for mimeographed mailed reports has been lessened. Information on foreign markets is now distributed in cooperation with the Foreign Agricultural Service and the trade.

In livestock market news, more emphasis was placed on auction markets and direct sales and on meat and wool reporting, in response to interest and demands for such information on the part of producers and market agencies.

Fruit and vegetable market news coverage was expanded on California and Missouri watermelons, Oregon potatoes, and tomatoes from Mexico. Additional shipping-point information is now being provided for commodities produced in Pennsylvania and New Jersey.

Grain market news was expanded to report more interior markets in California and Louisiana, because these markets became relatively more important barometers of trading during the year.

Tabulation of CCC sales prices on over 7.5 million bales of cotton aided materially in increasing the accuracy of spot cotton quotations in 14 designated spot cotton markets.

Tobacco market news was furnished to all auction markets and the trade throughout 1961. About 80 percent of the 1 million copies of reports issued were furnished directly to growers for use at the time their tobacco was offered for sale.

Standardization

The Agricultural Marketing Service now has 1,491 sets of Federal standards of quality applicable to 284 major agricultural commodities, including 995 standards for 24 types of tobacco.

Mass distribution of fruits and vegetables depends especially on fairly standardized and uniform produce. In fiscal 1961, 294 standards were in effect on fresh and processed fruits and vegetables and their products. New standards were introduced for canned crushed grapes and canned concentrated tomato juice, and standards were revised for 20 products. These revisions were part of a continuing effort to keep standards up to date.

Work continued on the development of new standards for poultry products and a study of water absorption to determine the normal moisture level resulting from good processing and chilling techniques. Control of water absorption was extended to all styles of packaging, effective August 1, 1961.

The Department published revisions of Federal specifications for fresh whole milk and processed Swiss cheese and interim specifications for nonfat dry milk and cultured buttermilk.

Official grain standards for rough rice, brown rice, milled rice, barley, and mixed grain were revised to make for greater usefulness in marketing.

A proposed revision of Universal Cotton Standards for American Upland Cotton was also prepared for presentation at the 13th Universal Cotton Standards Conference to be held in Washington, D.C., during 1962. The increased use of cleaning equipment at cotton gins makes revision necessary if the standards are to continue as a yardstick for marketing.

Purchases, Diversions, and Guides

Purchase and diversion programs are conducted to improve prices of farm commodities during periods of temporary market difficulty. The commodities, purchased with section 32 funds, are distributed to eligible recipients in the school lunch programs and in institutions, and to needy families.

In two separate purchase programs during fiscal 1961, the Agricultural Marketing Service bought about 100 million pounds of lard at a cost of $16.6 million. In an effort to improve prices to producers, a substantial percentage of total lamb production was removed from the market through purchase of 12.3 million pounds of lamb for $4.8 million.

To supplement the diets of needy persons, the Department also bought 108.3 million pounds of canned meats, costing $56.8 million. Another $37.5 million was used to buy about 32 million pounds of dried eggs. The Department also bought more than 7 million pounds of young chickens and nearly 19 million pounds of turkeys for school lunch programs.

Fruit and vegetable purchases with section 32 funds during fiscal 1961 included cabbage, canned ripe olives, and peanut butter. A diversion program in which potatoes were used for making starch was carried out during the fiscal year, and a date-diversion program initiated in 1960 was continued into 1961. The Department also con-

tinued processing applications from the previous year's cranberry payment program. The total cost of these purchase and diversion programs on fruits and vegetables came to over $16.3 million.

The acreage-marketing guides program is essentially an advisory service for vegetable growers to aid them in adjusting their farming operations to the rapidly changing demands of the produce industry. They provide to growers essential information on industry trends and the likely effects of these developments on commercial vegetable production in each area. Dissemination of information on the guides program was expanded sharply and extensive distribution was made in major producing areas.

Regulatory Functions

We moved quickly to strengthen the enforcement of regulatory acts designed to insure fair dealing between buyers and sellers; to render the private enterprise system actively competitive; and to make the bargaining power of producers more nearly equal to that of the buyers.

Under the Packers and Stockyards Act, a nationwide investigation of the lamb industry was nearing completion. It uncovered evidence indicating price manipulation and restraint of competition in lamb buying.

The investigation into alleged restriction of competition in the sale of hogs in Iowa was virtually completed. An examination of the hog-buying practices of packers in the Southeastern States revealed that many major packers were arbitrarily reducing the agreed purchase price after taking possession of the hogs. With one exception, where discussions were underway, this practice was stopped in 1961.

The U.S. Court of Appeals, Seventh Circuit, upheld the Department and directed one of the major meatpackers to cease and desist from discriminating in prices between purchasers of meat and meat food products with the effect of restraining competition.

A trade conference was held with representatives of auction market operators and arrangements initiated for a meeting with livestock producer representatives.

The number of tests of scales under the Federal-State cooperative program was stepped up 50 percent. The tests disclosed and led to correction of nearly 1,500 inaccuracies, including some at several major markets.

The Packers and Stockyards Division also increased its activities to determine reasonable rates and charges, adequacy of facilities, and trade practices of market agencies and dealers. This accompanied extension of jurisdiction of the act to persons and firms made subject to it by the 1958 amendment.

As of June 30, 1961, 14,593 market agencies and dealers were registered under the Packers and Stockyards Act—3,309 more than a year earlier. During the year, 4,788 new registrations were recorded and 1,479 old registrations rendered inactive.

At the end of the fiscal year, 2,217 stockyards were posted, including 155 posted during the year, and 2,967 packers were subject to the act.

Revised regulations under the Perishable Agricultural Commodities Act, effective August 1, 1960, constituted the first major overhaul since the regulations were originally issued in 1930. Extensive efforts were made to inform the industry of the new regulations and to encourage compliance.

An official of a Texas association had this to say about clinics conducted by USDA on the Perishable Agricultural Commodities Act:

> I wish to thank you sincerely for the part you played in making so successful our three PACA clinics last week. I know all of those who attended gained a new insight into PACA and have a much better understanding of their rights and responsibilities under these regulations. . . . I am hopeful we can have a repeat performance on these clinics each year as I know they are well worth the time and expense involved in having them.

Late in the fiscal year "good delivery" tolerances for lettuce were proposed by the Department for inclusion in the Perishable Agricultural Commodities Act regulations and given wide publicity in trade papers as an aid to the marketing of lettuce. The first undertaking of this type, the proposed standards set specific terms of the contract. They are entirely separate from tolerances provided in the U.S. standards for grades of lettuce.

In giving increased attention to misbranding of products, spot checks were conducted during the year, chiefly in the terminal markets of 20 States and the District of Columbia. Investigators visited 840 firms and examined more than 3,000 lots of produce to verify grade, size, State of origin, variety, net weight, and other pertinent markings. More than 1,200 other lots of produce were spot-check inspected at destination markets, and 110 certificates were issued covering misbranding violations. Correction of misbranding was accomplished mainly by obliterating incorrect markings. Spot checks for misbranding at shipping points disclosed 12 violations which were subsequently corrected.

The AMS Fruit and Vegetable Division closed 2,439 cases under the Perishable Agricultural Commodities Act during the year. The number of formal complaints has shown a steady increase.

Prosecution under the Federal Seed Act was successful in 26 cases, and 4 seizure actions were completed. Imports of agricultural and vegetable seeds totaled 366 million pounds, the largest quantity inspected in any year since the Federal Seed Act became effective in 1939.

Protective benefits offered to farmers and others under the U.S. Warehouse Act were further extended in 1961. The program of warehouse examination required for licensing and bonding under the act now covers a total storage space for nearly 1.3 billion bushels of grain and 13.6 million bales of cotton. Corrective action to assure safekeeping of farm products was taken in more than 700 establishments, and 18 licenses were suspended for major violations.

Department marketing specialists made presentations in 115 separate actions involving freight rate and service matters to help hold down marketing costs for farmers and agricultural shippers and to improve transportation services and facilities.

Marketing Research

Commenting on a method developed by marketing research for detecting water core in apples—a condition that cuts the storage life of the fruit—an apple buyer said:

> We took samples of apples from 80 growers whom we suspected had pending storage trouble and scheduled shipments according to culture, or marketing research test, developments. I would estimate that this one little room where the testing was done saved those growers a loss of more than half a million dollars that would otherwise have been incurred because of storage trouble.

This illustrates the importance of market quality research, which improves and maintains the quality of agricultural products in trade channels.

Substantial progress was made in this field during 1961.

> Marketing researchers recommended an improved method for marketing Bartlett pears. By starting the ripening process while the pears are in transit, shippers can bring the fruit to consumers earlier in the season, thus avoiding market gluts. Since the pears are shipped at higher temperatures, less ice is required, saving growers and shippers $80 a car early in the season and $30 a car later, when more refrigeration is required.
>
> Marketing scientists developed a mechanical device for splitting peanut kernels and turning the halves for inspection on both sides, saving nearly half a man-hour in the inspection of each 1,000-gram sample.

Researchers also reported on polyethylene box liners that extend the storage life of Golden Delicious apples; heavier loading of Sebago potatoes without damage that cuts transportation costs; an effective malathion treatment for stored farmers' stock peanuts; and a handbook on various rail protection services and recommendations for their use.

Many benefits result from the application of facilities, transportation, and handling research.

The success of the new Georgia State farmers' market located in Atlanta, designed by AMS researchers in cooperation with State and local agencies, is evidenced by the comment of a local farmer:

> I think it's one of the greatest things that the Department of Agriculture and the State of Georgia have ever done. It has helped farmers market their merchandise as it should be marketed.

During fiscal 1961, researchers recommended new shipping containers for cantaloups that can save growers, shippers, and rail carriers as much as $4 million a year and place a better product in consumers' hands. They showed apple packing plant operators how to cut costs by adopting improved methods and equipment in packing line operations. They pointed the way to cut the cost of handling groceries from the warehouse to retail store by as much as $155 per thousand cases.

New York, San Francisco, and four other cities requested assistance in planning new wholesale food-distribution centers and processing plants. In each of these cities, the closing of old, inefficient markets by redevelopment programs affords opportunity to build modern, more sanitary food-handling facilities.

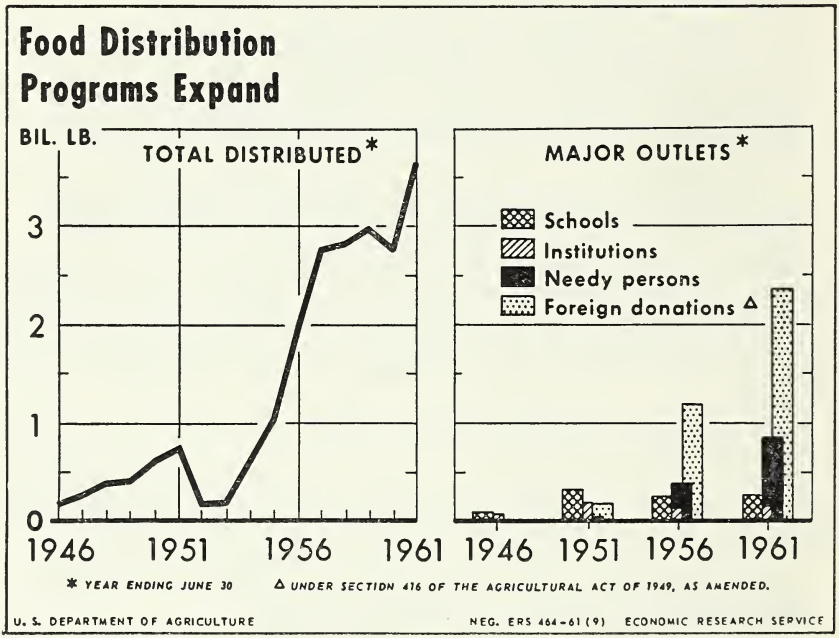
During 1961 the Transportation and Facilities Research Division of AMS was cited by the Truck Trailer Association for developing

a new method of measuring heat loss in trailers. The citation reads, in part:

> In grateful appreciation for researching and developing a practical method of rating the performance and effectiveness of refrigerated truck trailers used in the transportation of perishable foods.

Food Distribution

An accelerated food-distribution program, spurred by the first Executive order, helped spread the benefits of America's agricultural abundance to more than 23 million persons in fiscal 1961. Included were 15.5 million schoolchildren, 1.4 million persons in charitable institutions, and 6.4 million needy persons in family units.



About 1.3 billion pounds of food, valued at $246 million, were donated for distribution in 50 States and the territories during fiscal 1961.

The newly expanded program, which places special emphasis upon providing additional food to supplement the diets of needy persons in areas of chronic unemployment, added five new items to its list of donated commodities. In addition to flour, cornmeal, nonfat dried milk, rice, lard, and butter, needy families early in 1961 began receiving canned pork and gravy, dried whole eggs, dry beans, peanut butter, and rolled oats.

Several times during the year, USDA-donated foods were diverted to feed disaster victims. When Hurricanes Donna and Ethel whipped across our Southern States, emergency distribution centers took care

of those left homeless. USDA foods also were served to flood victims in other areas of the country.

In eight areas of the country, an experimental food-stamp program was put into effect to determine the effectiveness of this type of program. Needy persons in these areas use stamp coupons instead of money to buy food at local grocery stores. They buy the coupons with their usual food money and receive additional coupons without charge. In this way, they are able to purchase a broader variety of foodstuffs and to obtain a better balanced and more nutritious diet. Because the program utilizes regular trade channels, the use of the stamp coupons also aids the general economy of the area.

A letter from the Honorable Wallace W. Barron, Governor of West Virginia, describes the effects of these programs in his State. Here are excerpts:

> Two programs in particular, the direct distribution of surplus commodities to the needy and the pilot food-stamp plan in McDowell County, have bolstered the morale and the will to do for themselves of the people reached by these programs.
>
> In only 3 months of operation, McDowell County's stamp plan has had dramatic consequence on the health, mental attitude, and the economy of the Mountain State's southernmost county. * * *
>
> One mother, whose infant subsisted mainly on dried milk, tells us the child is gaining in weight and is less sickly now that food coupons enable her to buy whole milk. "Never before had the baby's diet included fresh milk," she reported. * * *
>
> However temporary, the pilot program has gone far to restore human dignity to food-stamp recipients and their families. They no longer queue up for commodities, but have the freedom to buy the foods they need most in the same manner as their more fortunate neighbors.
>
> This is not to say that there is no place for commodities in West Virginia. As in every State of the Nation, the aged, the indigent, the unemployed must be cared for. Commodities go a long way in doing this, especially since President Kennedy's Executive order increasing both variety and quantity of foods to be distributed to eligible West Virginians. * * *
>
> Donated commodities played an important role in the July flash-flood disaster in the Charleston area. * * *
>
> During the peak period of emergency aid, 16 kitchens were set up for distribution and serving of hot lunches. Four to five thousand persons were fed and served from these stations. In the 4 days of emergency, the Department of Welfare distributed more than 110 truckloads of commodities to the emergency feeding spots and distribution points. This represented more than 200,000 pounds of surplus foods.
>
> This definitely broke the barrier of hysteria these flood-ravaged families were living behind, and gave them the hope needed to begin rehabilitation. * * *

As the National School Lunch Program celebrated its 15th anniversary in fiscal 1961, 64,000 schools served 2.3 billion lunches during the year. These schools purchased approximately $575 million worth of food in local markets and received $133 million worth of donated commodities from USDA. Federal cash assistance funds amounted to $93.7 million. Including payments made by children for lunches, a total of about $860 million was contributed to the program from sources within the various States. Such contributions totaled $776 million in 1960.

The Special Milk Program, which is used to encourage school-age children to drink more milk, also expanded in fiscal 1961. Over

86,000 day nurseries, child-care centers, summer camps, and schools served 2.5 billion half pints of milk under the program, a gain of about 4 percent over the preceding year. In addition, 2.3 billion half pints of milk were dispensed through the School Lunch Program. A school in Cuba, N. Mex., reporting on the School Lunch Program, said:

> For many of our children this noon meal in school is the only decent meal they get.
>
> In the name of the children and the parents we thank you for all you do for our children, especially just now when unemployment leaves many families almost penniless.

Schoolchildren had a chance to try a nutritious food unfamiliar to many of them, when we offered canned ripe pitted olives to schools taking part in the School Lunch Program.

Among the immediate results were: Consumption of an oversupply of medium-sized olives that would have burdened the market; earlier payments to many growers for their crop; and the hiring of 80 extra persons for 12 weeks by an olive growers' cooperative in early 1961.

One long-range result may be a permanently broadened domestic market for a crop worth more than $10 million in 1960, and grown on more than 4,000 farms.

Food-distribution personnel continued to work with food producers, State marketing and agricultural officials, food-trade groups, and food-service organizations to attain maximum movement of agricultural products through normal marketing channels. In addition to the regular monthly programs to focus attention on foods in plentiful supply, 7 special nationwide food campaigns and 14 regional food promotions were conducted in cooperation with industry. These included campaigns on cranberries, dairy products, turkeys, eggs, cabbage, beef, lamb, broilers and fryers, potatoes, tomatoes, peaches, canned ripe olives, onions, sweet corn, grapefruit, and celery.

In a report to stockholders, the president of a large cranberry cooperative commented:

> Last year we had the benefit of the Marketing Service of the U.S. Department of Agriculture in the fall promotion of the sale of cranberries. This was a tremendous operation. To estimate the dollar value of this assistance is impossible, but it would run into hundreds of thousands of dollars. I am sure that a good measure of our success last year was due to this assistance from the Department of Agriculture.

Federal-State Matching Fund Program

Matching fund Marketing Service programs, conducted by State departments of agriculture in 40 States under the Agricultural Marketing Act of 1946, help producers and marketing agencies solve their marketing problems.

This work falls into four general fields: (1) Improving and maintaining the quality of agricultural products; (2) expanding outlets for agricultural products; (3) increasing marketing efficiency and reducing costs; and (4) assembling and disseminating marketing information. In 1961, the Agricultural Marketing Service helped the 40 States plan and carry out 117 projects in these fields and paid up to half their cost.

Following are typical accomplishments under this program:

- Since the dairy quality improvement program was started in North Dakota, the percentage of milk samples testing grade A has risen from 46 (in 1953) to 81.4 (in 1960).
- Special livestock sales organized by the Kentucky Department of Agriculture have brought producers $2.50 more per hundredweight for feeder pigs and from 75 cents to $1.35 more for lambs than when sold through usual markets.
- Growers of fruits and vegetables who marketed their products around Birmingham, Ala., without properly grading, sizing, and packing them found their outlets restricted to nearby small stores and eating places. In this situation, a few extra loads could glut the market. Large and distant buyers want uniform products in proper containers. A project was developed to show these growers how to size, grade, and package their products, and large local buyers and distant buyers were informed that they could find what they wanted on the Birmingham market. Outlets for products of family-size farms were immediately broadened.
- On the basis of a study conducted under the matching fund program in 1959, the State of Maryland assisted in bringing about the construction of a soybean processing facility to process 150 tons per day. This plant will provide a market for locally produced soybeans and an important ingredient for broiler feed.

Civil Defense

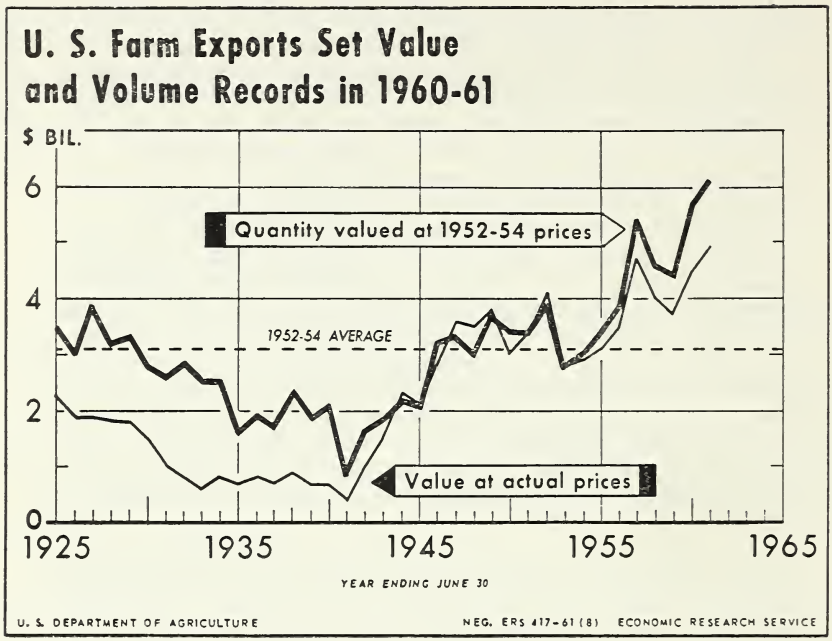
Major strengthening of emergency food processing, storage, and distribution plans and organization for civil defense was accomplished in 1961. Selected key AMS employees were given special training for service in a national emergency at the State level. Working within AMS divisions, they are broadening the number of trained staff members. This planning and training is carried out largely by personnel assigned to regular AMS programs.

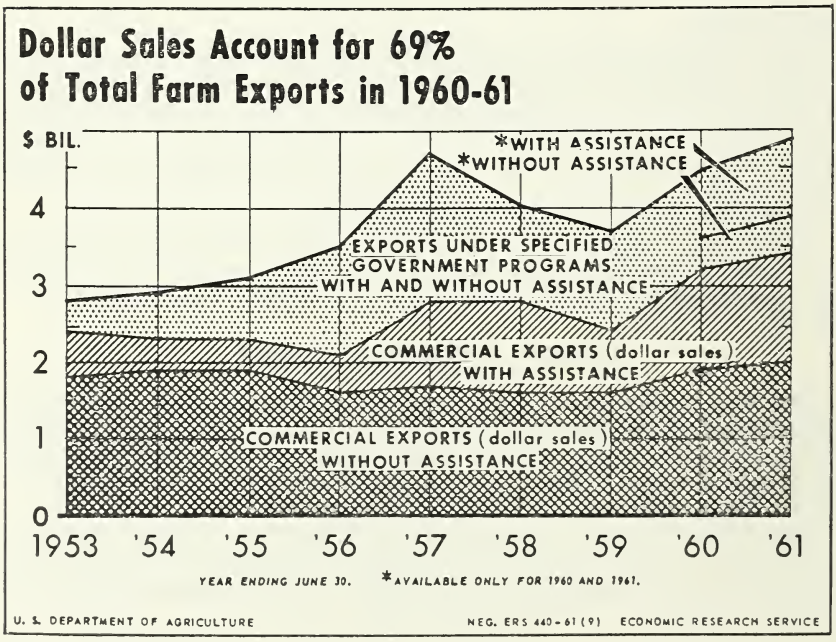
The major objective of the emergency food management planning and training program is to attain a readiness to cope with the food processing and distribution problems which would arise after a nuclear attack.

Foreign Agricultural Service

The United States in the year ending June 30, 1961, shared its agricultural abundance with the world as never before. Total agricultural exports had a value of $4.9 billion, $200 million higher than the previous record of fiscal 1957—and $400 million, or 9 percent, above 1960. Dollar sales were $3.4 billion, also a record.

About one-half of U.S. cotton, wheat, and rice production went overseas. So did two-fifths of our tallow and grease output, nearly one-third of our tobacco, and one-fourth of U.S. soybeans and oil.


U. S. Farm Exports Set Value and Volume Records in 1960-61
$ BIL.
6
4
2
0
Quantity valued at 1952-54 prices
1952-54 AVERAGE
Value at actual prices
1925
1935
1945
1955
1965
YEAR ENDING JUNE 30
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 417-61 (8) ECONOMIC RESEARCH SERVICE


Dollar Sales Account for 69% of Total Farm Exports in 1960-61
$ BIL.
4
3
2
1
0
*WITH ASSISTANCE
*WITHOUT ASSISTANCE
EXPORTS UNDER SPECIFIED GOVERNMENT PROGRAMS WITH AND WITHOUT ASSISTANCE
COMMERCIAL EXPORTS (dollar sales) WITH ASSISTANCE
COMMERCIAL EXPORTS (dollar sales) WITHOUT ASSISTANCE
1953
'54
'55
'56
'57
'58
'59
'60
'61
YEAR ENDING JUNE 30. *AVAILABLE ONLY FOR 1960 AND 1961.
U. S. DEPARTMENT OF AGRICULTURE
NEG. ERS 440-61 (9) ECONOMIC RESEARCH SERVICE

Strengthened Services

Organizational changes were made which placed in one Department agency the administration and coordination vital to the effective movement of U.S. agricultural commodities abroad.

The functions of the General Sales Manager, and of the Barter and Stockpiling Division, were transferred as of February 24, 1961, to the Foreign Agricultural Service.

This brought into FAS the General Sales Manager's responsibility with respect to export sales policy, including export sales of CCC commodities for dollars, and credit sales.

It also placed in FAS responsibility for the barter program, under which agricultural commodities are exchanged for strategic and other materials for stockpiling, or for materials and equipment needed for foreign economic and military aid, or other Government purposes.

Agricultural Attachés

The attaché system, core of the Foreign Agricultural Service's general foreign agricultural intelligence and market development activity, was strengthened by the establishment of new posts at Lagos, Nigeria, and Warsaw, Poland. This expanded the Department's unique global representation and reporting system to 56 posts covering 113 countries.

Representatives at these posts sent in almost 5,000 reports, exclusive of cables and other communications, that enabled U.S. agriculture to keep abreast of changes in agricultural policies or competition likely to affect our markets abroad. This flow of reports also provided prompt information regarding foreign agricultural production and supplies, and the needs of importing countries.

New marketing specialist posts abroad were established in London, England, and Hamburg, Germany. Market specialist attachés at these posts will make market contacts, supply trade intelligence, manage trade centers, and generally serve American agricultural export interests in world trading centers.

Developing Dollar Markets

The expansion of dollar sales of U.S. farm products is, of course, a multipronged operation. The major activities of fiscal 1961 in this field were:

Cooperative market development.—With the cooperation of private trade groups, we stepped up the tempo of market development. The approval of 102 new market development projects brought the number of such projects to 532 in 55 countries. This program which began in 1955 has more than 50 trade groups participating in it.

Development work stresses market research, product promotion, general publicity, and participation in international trade fairs.

Some of the specific accomplishments over the years include:

1. Increased cotton consumption in 11 countries where the program has been operating for 3 years or more.
2. A rise in poultry exports to Europe to 127 million pounds from 1 million in 1955.
3. Commercial purchase by Spain of more than 90,000 tons of soybean oil during fiscal 1961.

4. A tenfold rise in rice exports to Europe in the past 4 years.
5. A 126-million-pound increase in tallow exports to Japan in the past 2 years.
6. A 7.5-million-pound increase in tobacco exports to Japan in the past 5 years.

A Government-industry task force has recommended that the foreign agricultural market development program be expanded and made permanent.

The objectives of the program, the task force concluded, should include production of farm commodities directed more specifically at the export market; an intensified education program on changes in U.S. marketing needed to meet foreign demand and competition; improved grades and inspection procedures; and continuous study of U.S. export pricing to assure competitive prices.

The group called for more effective action overseas in trade liberalization, market information, product promotion, marketing assistance in underdeveloped countries, the handling of trade complaints, and the introduction of new products.

Trade fairs.—During fiscal 1961, agricultural trade promotion exhibits were presented at 12 international fairs, bringing to 89 the total of such exhibits since 1955. About 40 million foreign buyers and potential customers have viewed these displays. Some 400,000 persons went through the U.S. exhibit at the 50th Paris Trade Fair, one of the largest in Europe. Featuring many convenient and timesaving foods, the exhibit showed how these foods could complement French cooking.

Plans were well underway as the fiscal year ended to sponsor an independent agricultural show at Hamburg, Germany, as the largest promotion of its type and the first USDA exhibit to accommodate commercial exhibitors on a large scale. There were further plans for a series of agricultural displays, beginning in the fall, in a trade center established with the Department of Commerce in London, England.

Access to dollar markets.—Vigorous efforts continued with measurable success to eliminate or reduce barriers raised against U.S. farm products by other countries. We worked through formal diplomatic representation, through participation in international meetings such as the General Agreement on Tariffs and Trade (GATT), and through other contacts, and we kept in particularly close touch with developments of the European Economic Community, or Common Market. It is to the interests of U.S. agriculture that the policies of that economic area should be trade expansive rather than trade restrictive.

Title IV dollar-credit sales.—The first agreement for dollar-credit export sales under title IV of Public Law 480, which provides for long-term supply and dollar-credit sales of U.S. farm products, was negotiated. This agreement, with El Salvador, finances the sale of $2 million worth of wheat or flour (or about 920,000 bushels).

Under title IV the U.S. Government is authorized to agree with governments of friendly nations for delivery of U.S. agricultural

commodities for periods of up to 10 years, with credit periods up to 20 years.

Barter

For the first time since the beginning of the barter program, private industry was invited to assist in a study and assessment of the program. A task force drawn from many representatives of export and import firms and trade associations provided numerous valuable recommendations. As a result of this study, we expect new policies and program changes to make the barter program even more effective.

Bartered agricultural commodities exported during the year ending June 30, 1961, were valued at $131.9 million, while materials delivered to the Commodity Credit Corporation by contractors were valued at $168.5 million. Both figures include some deliveries contracted for prior to July 1, 1960.

Barter can serve the needs of buyers and sellers alike. For example, we conserved an outlay of $16 million which otherwise would have moved abroad when several GSA contracts for cash purchase of materials were converted into payment by agricultural products.

On the other hand, by accepting materials produced in less developed countries, we helped to stabilize the economies of these countries and furthered their trade with the United States. Materials accepted include manganese from Brazil, chrome ore from Turkey, bauxite from Jamaica, ferromanganese from Chile, mica from the Malagasy Republic, diamonds from the Congo, and manganese from Greece and Ghana.

Sales for Foreign Currency

Title I of Public Law 480 continued as a major factor in increasing agricultural exports under the food-for-peace program. During fiscal 1961, commodities exported under title I reached a peak of $932 million at export market value, or 19 percent of total U.S. agricultural exports. This compared with a total of $825 million, or 18 percent of the total, during the previous year, and the 1957 record of $910 million.

Title I exports were particularly important for wheat, rice, soybean oil, and cotton. The 335 million bushels of wheat and flour exported under title I were more than half of the total wheat exports; the 11.9 million bags of rice were about two-thirds of total rice exports; the 530 million pounds of soybean oil, about 60 percent of the total; and the 1.3 million bales of cotton, about 20 percent of all U.S. cotton exported.

Title I agreements reached with 23 countries during fiscal 1961 provide for the sale of commodities valued at about $1.8 billion at world market prices. This total includes $225 million in ocean transportation costs.

Of the nearly $1.8 billion in foreign currencies accruing from these agreements, 40 percent was reserved for loans to foreign governments for economic development, 30 percent for grants for the same purpose, 20 percent to pay U.S. expenses and to finance U.S. agency programs,

and the remainder for loans to private business firms and for military assistance.

World Food Needs Summarized

In a basic action to help the United States and other food-abundant nations use abundance more effectively abroad, a special task force prepared the first comprehensive summary ever made of the world food gap.

It shows, area by area, and country by country, food supplies and food needs. It provides an extremely useful guide for the wise use of U.S. agricultural abundance in the years immediately ahead.

Commodity Exchange Authority

The Commodity Exchange Authority works to assure correct registration of prices, to protect the "hedging" services of the futures markets, and to assure fair practices in futures.

Futures prices must be protected against unfair or manipulative trading because they are used as guides in the buying and selling of cash wheat, corn, cotton, and other crops at country points and at terminal markets.

Hedging, which is the nonspeculative buying or selling of futures to offset or diminish price risks in handling actual commodities, is commonly engaged in by merchants, processors, farmer cooperatives, and some individual farmers. It is an operation which obviously depends for its effectiveness on fair trading practices.

By keeping watch on the activities of large speculators and hedgers and commodity futures brokers, and requiring them to make daily reports on their futures operations, the Commodity Exchange Authority safeguards prices to farmers and protects the hedging system. CEA enforces "speculative limits" applicable to large traders in grains, soybeans, cotton, and eggs; periodically audits the books of commodity brokerage firms engaged in soliciting orders and accepting funds from traders in regulated commodities; and investigates and furnishes evidence to prosecute those accused of price manipulation, abusive trading practices, and other violations of the Commodity Exchange Act.

In fiscal 1961 the volume of futures trading supervised by the CEA rose 50 percent above the year before. Trading in the grain futures markets—amounting to 18.5 billion bushels, the largest since fiscal 1930—was led by unprecedented activity in soybean futures at a time when the futures markets for wheat, corn, and oats were also very active. The 1961 trading volumes of wool, eggs, flaxseed, lard, cottonseed oil, and soybean meal also surpassed 1960 volumes.

The CEA supervised futures trading for 17 commodities in fiscal 1961. The total of transactions—11,454,000 against 7,462,000 in 1960—was the largest on record.

The dollar value of regulated futures trading was estimated to be $52,300 million, nearly twice the previous year's estimate of $26,500 million.

PROTECTING FARM PRICES AND INCOME

In calendar year 1961 several extremely significant strides were made toward commodity and cropland stabilization and better program administration. Outstanding among these steps were the revitalization of the county and local farmer committee system, the Feed Grain Stabilization Program, and the transfer of the cost-sharing Agricultural Conservation Program and the Federal milk marketing orders to the Agricultural Stabilization and Conservation Service.

Agricultural Stabilization and Conservation Service

Revitalization of the ASC Committees

One of the early directives announced in the special farm message to the Congress of March 16, 1961, was "to revitalize the county and local farmer committee system and to recommend such amendments as may be necessary to safeguard such farmer participation."

Action followed immediately. The election boards set up in 1954 were abolished, and the election of community and county committeemen was returned directly to the farmers themselves.

Under authority vested in the Secretary of Agriculture by the Soil Conservation and Domestic Allotment Act of 1936, as amended, the regulations governing the selection and functions of agricultural stabilization and conservation county and community committees were consolidated and revised.

In elections held between July 1 and December 30, 1961, farmers in each agricultural community voted for people from their own ranks to be members of ASC community committees. The chairmen and vice chairmen of the elected ASC community committees then set about to act as delegates to a county convention to elect ASC county committees for the ensuing year.

The county ASC committee, subject to general direction and supervision of the State committee, and acting through elected community committeemen and employed personnel, is generally responsible for carrying out in the county the Agricultural Conservation Program, the price-support programs as assigned, the acreage allotment and marketing quota programs, the new feed grain and wheat stabilization programs, emergency disaster assistance, the wool incentive payment program, the programs under the Soil Bank Act, the sugar program except in the State of Hawaii, and any other program assigned to it by the Secretary of Agriculture or the Congress.

Farmers everywhere are affected by these farm programs, even those who do not take part. It is important to each farmer that these programs be run right. Under the revitalized farmer committee system, farmers in each community will help decide what kind of programs their county will have. Never before have so many farmers, or any other group of citizens, had so direct a voice in running complex government programs.

Farmers across the Nation have voiced approval of the changes in the committee election procedure. Announcement of the new regulations also boosted the morale of incumbent committeemen.

Two examples illustrate this.

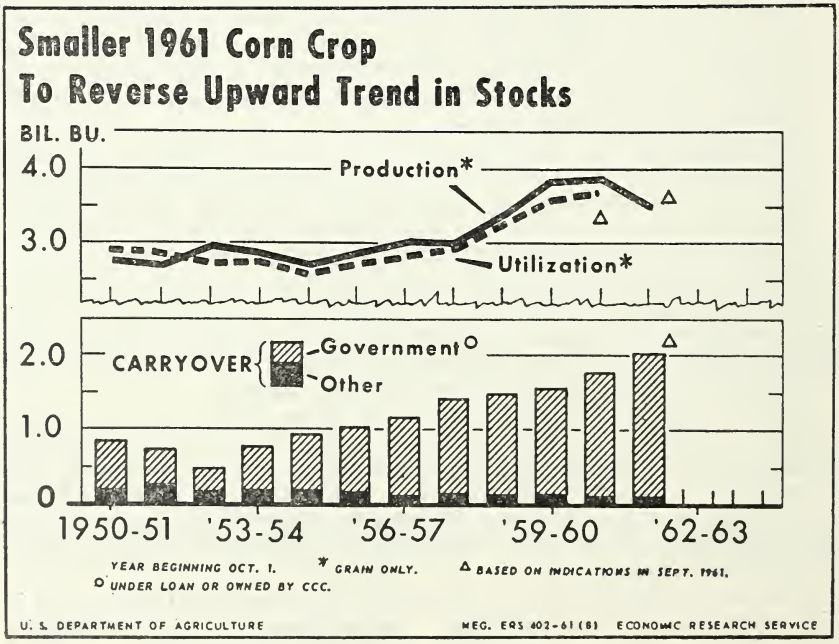
First, the 1961 feed grain program. For the first time in many years county and community committeemen took the lead in presenting program facts to producers. With support from other USDA agencies, farm groups, and other producers, the ASC committeemen achieved in only 8 weeks an unexpectedly large signup in the emergency feed grain program. (See Feed Grain Stabilization below.)

The second example is the wheat referendum of August 24, 1961. County and community committeemen were asked to help tell farmers the facts about the proposed 1962 wheat stabilization program. They encouraged every eligible voter to go to the polls. The results were a 56-percent increase in the number of eligible voters who went to the polls in 1961 over the year before—278,515 in 1961 as compared with 178,718 in 1960.

Feed Grain Stabilization

Feed grain production has expanded tremendously in recent years. As a result, Government acquisitions and holdings of feed grains under the price-support program have gone up constantly, adding tremendously to the costs of farm programs. A continued buildup of feed supplies also presents a serious threat to the stability of the Nation's livestock and poultry industries.

While use of feeds has been on the rise through greater livestock and poultry production, exports and other means, this has not matched the production climb. Inevitably, carryover levels have gone up substantially, and at the beginning of the current marketing year the



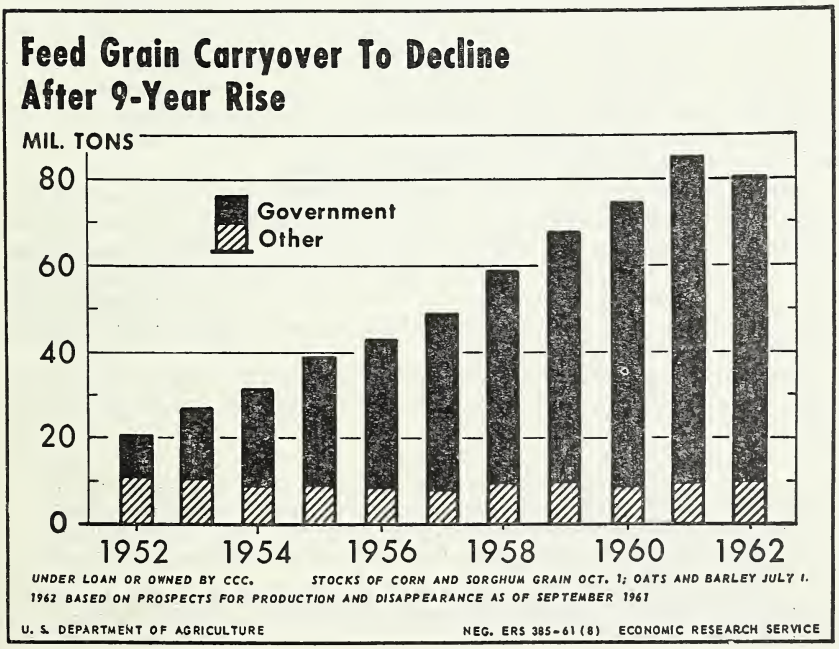
carryover was more than double that at the beginning of the 1955–56 marketing year.

Shortly after the administration took office, an emergency program designed to bring feed grain production into better balance with needs was recommended to the Congress. The Congress acted swiftly to provide the authority and the legislation was signed into law in March.

Recognizing that time was short before farmers would be in the field planting their 1961 corn and grain sorghum crops, the administrative machinery of the Department was set in motion immediately to sign farmers up under the program. The revitalized farmer committee system played a major role in the effort.

Even though many farmers had made their 1961 production plans and had laid in their seed, fertilizer, and other production needs by the time the program was underway, the response was tremendous. It was immediately apparent that many farmers recognized the need for and were ready to participate in a program aimed at downward adjustment in feed grain production.

Basically, the program provided payments to producers who diverted corn and grain sorghum acreage to a conserving use. Those who participated in the program were eligible for corn price support at a level of 14 cents a bushel higher than for the 1960 crop, and for grain sorghum price support of 41 cents per hundredweight higher. With the machinery available to bring some adjustment in feed grain production, it was possible to raise the support levels.



Participating producers reduced their corn and grain sorghum acreages by a minimum of 20 percent below base acreages which reflected their 1959–60 average acreages devoted to these two crops. For this diversion, producers were eligible for a payment equal to 50 percent of the normal production on their diverted acreage multiplied by the county support price.

The program also provided for further reductions at a higher payment rate. This additional reduction could be any amount up to 20 percent more. As an added incentive, the higher payment rate was at 60 percent of normal production. Small farmers were given an opportunity to divert as much as 20 acres if they wished.

Signup under the program began in mid-April, and by May 31, when the signup was ended, more than 1,170,000 farmers (about 42 percent of the Nation's corn and grain sorghum farmers) had agreed to put about 27 million acres into conserving uses (20.1 million acres of corn and 6.6 million acres of grain sorghum acreage). Farmers actually diverted about 95 percent of the acreage designated for diversion in the signup. The final compliance check shows that about 19.1 million acres of corn land and about 6.1 million acres of grain sorghums were taken out of production as a result of the program.

The 1961 feed grain production could have been 800 million bushels more than it actually was, if the emergency feed grain program had not been put into operation. As a result, Government acquisitions from the 1961 crop were very greatly lessened. The ultimate savings to the taxpayers, by reason of the 1961 feed grain program, will be about $600 million.

The program provided for payments in kind from Government-owned feed grain stocks for diverting acreages to conserving uses. Farmers were given the option of accepting delivery of grain or of asking the Commodity Credit Corporation to market the grain represented by certificates issued under the program and taking instead cashable sight drafts. These payments, in the aggregate about $782 million, were to provide income to producers during the period of adjusting to a more realistic production level.

The payment-in-kind feature of the program permitted use of the sizable Government feed grain stocks to cushion the downward adjustment in supplies for livestock and poultry producers and other feed grain users. By moving these stocks into use, feed grain supplies and prices could be stabilized at fair levels, thus protecting the budgets of the Nation's families who are the ultimate consumers of livestock and poultry products.

The following is part of a letter from Mr. D. H., a tenant farmer in Ross County, Ohio, and is typical of the general reaction to the program:

> This is straight from a horse's mouth.
>
> As a tenant farmer on 412 acres of Scioto river bottom land and manager of 767 additional acres of adjoining land, I feel that the Feed Grain Program has been a great help to me as well as to the landowner.
>
> We in the Scioto river bottom are primarily corn farmers, with most of the corn sold as a cash crop.
>
> We participated in the feed grain program the full 40 percent on all three farms thus reducing our acreage of corn from between 450 and 500 acres to around 280.

I feel the program has helped us in the following ways:
(1) The cash received has without doubt boosted our net income.
(2) We required less additional help because of reduced corn acreage.
(3) Less wear and tear on machinery.
(4) Permitted us to retire some land to legumes and grasses.
(5) Also permitted us to fallow more bottom ground and control Johnson grass.
(6) Less worry during the wet spring and summer trying to get the corn cultivated.
(7) Had less corn on the low bottom ground to worry about being lost to a flood.
When all the above are taken into consideration, the feed grain program fits into our practices as if it had been tailormade for us. It couldn't have been inaugurated at a better time with the cold late spring, the late spring flood, and the wet summer.

In developing recommendations for a feed grain program for 1962, it was necessary to consider not only the need for continuing the 1961 feed grain program for corn and grain sorghum, but the need for including barley.

Annual production of all feed grains from 1951 through 1960 increased from 105 to 155 million tons. Production exceeded utilization in each of the intervening years, resulting in a steady buildup of feed grain stocks to a record high of 75 million tons in 1960.

In 1961, over 85 percent of these excess stocks of grains were in the form of carryover owned by CCC or held under the 1960 price-support program. CCC investment in feed grains had doubled since 1956, and in 1961 was more than $4 billion.

Along with corn and grain sorghum, barley supplies increased steadily after 1952. In 1958, the total supply of barley reached a record of 659 million bushels, about double the 1952 supply. Total acreage planted to barley increased from less than 10 million acres in 1952 to 17.4 million acres in the period 1957–60.

Since the 1961 crop of barley had already been planted by the time the 1961 feed grain program was authorized by Congress, barley was not included. But a barley feed grain program, much the same as the corn and grain sorghum programs, was recommended to, and approved by, Congress for the 1962 crop year.

The 1962 barley program, while related to the corn and grain sorghum programs, will be operated separately to simplify administration and prevent confusion on the part of producers.

Wheat Stabilization

When this administration came into office in January 1961, wheat supplies in the United States were at an alltime high.

Under provisions of the Agricultural Adjustment Act of 1938, a national wheat acreage allotment of 55 million acres had been established and maintained during the past 8 years despite the fact that both per-acre yields and total wheat supplies had increased steadily.

During the same period the average support price for wheat had been reduced from $2.20 per bushel in 1952 to $1.79 in 1960. Yet, under this program, wheat supplies increased to the point where stocks in all positions as of June 30, 1961, totaled 1,407 million bushels, approximately 801 million bushels more than in 1953. Current estimates indicate a similar record supply position for 1961–62. Of

the total supply in mid-1961, more than 90 percent was wheat in CCC stocks or under CCC loan.

Stocks of wheat have continued to accumulate even though wheat exports reached an alltime high during the past year and exceeded domestic consumption for the first time in history.

Because these wheat programs have failed to prevent a constant buildup of excess wheat, this administration requested, and the Congress passed, legislation which provides for a 10-percent reduction in the national wheat acreage allotment as an essential part of the wheat stabilization program in 1962.

Under the new program, approved by 79.4 percent of the producers voting in a referendum August 24, marketing quotas will be in effect on all farms with more than 13.5 acres of wheat, and on some farms with smaller acreages. Production from excess acres will be subject to a marketing quota penalty at the rate of 65 percent of parity instead of at the rate of 45 percent in effect under the old program.

In addition to marketing quotas, with basic farm acreage allotments reduced 10 percent, the total acreage allotted for 1962-crop wheat was lowered from 55 to 49.5 million acres. Producers can earn payments when their acreage of wheat does not exceed their farm allotment and when they increase the conserving-use acreage on their farms by an acreage equal to the reduction in their allotments. Payments earned for this diversion and conservation use will be based on 45 percent of the normal yield.

Producers who divert additional acres up to one-third of their farm allotment will earn payments based on 60 percent of the normal yield for the farm. This diverted acreage must also be used for conservation. Those producers in commercial wheat areas who comply with allotments and participate in the wheat stabilization program are eligible for price support at the national average of $2 a bushel on their 1962 crop.

Provisions of the 1962 wheat stabilization program will not only help to control and reduce excess wheat production, and the costs attendant on Government acquisition, storage, and handling, but will aid materially in increasing grower income from wheat while at the same time assuring adequate supplies of wheat for consumers at fair and stable prices.

Under the previous program the addition of another 100 million bushels of wheat to Government stocks from the 1962 crop could have been expected. The new program will completely reverse the pattern that has been in effect for the past 8 years. Instead of adding 100 million bushels to Government stocks, we expect a decrease of about 100 million bushels in 1962.

This alone should provide a saving to taxpayers of more than $250 million—$50 million during the 1962 crop year, and the remainder during the time that the additional 1962 wheat would have remained in storage.

Agricultural Conservation Program

A dramatic example of self-help through conservation cost sharing is the 15-farm water diversion and impoundment ACP pooling agreement project on the Navaho Indian Reservation near Dinnehotso, Ariz.

Twenty years ago about 90 Indian farmers and their families raised crops and livestock and earned their living by farming a little valley near Dinnehotso watered by Laguna Creek.

Seasonal flooding, erosion of the thin desert soil, and inability to manage annual snowmelt and spring rainfall so as to store water for use when it was needed, and make it available where it was needed, forced these Indian farmers and their families from the valley. Today, only a score of small farms remain.

The Navaho Tribal Council, the Bureau of Indian Affairs, and the Agricultural Stabilization and Conservation (ASC) Committee of Arizona agreed this was a conservation problem and considered ways to help the Navaho farmers. Arrangements were made for a pooling agreement under the Agricultural Conservation Program. A main dike and a "kicker" dike were constructed to channel floodwaters from Laguna Creek away from the farmland. A reservoir was constructed and fenced, and a system of ditches, pipes, and gates installed to divert the seasonal flow of Laguna Creek and impound it in the reservoir to provide irrigation water for the valley farmland.

Because of the low level of income of the 15 farmers participating in the project, special arrangements were worked out whereby the Agricultural Conservation Program (ACP) provides necessary technical assistance and about half the cost of the project; the Navaho Tribal Council pays about one-fourth the cost; and the farmers themselves are contributing about a fourth of the cost in cash, labor, and use of equipment.

This project is typical of many where local farmers recognize their conservation needs, want to solve them, but need additional resources and technical help to get the total job done. The ACP is designed to assist with such resources and help. The results of this project will benefit these farms, and all who live on the Navaho Reservation for many years to come.

During 1961, the national ACP continued to operate in every agricultural county of the United States and its territories as a farmer-Government partnership to meet local conservation needs of individual farmers and of communities.

The program is coordinated nationally by the Agricultural Stabilization and Conservation Service. It is administered by ASC committees of farmers in all States and agricultural counties. The State director of agricultural extension is a member of the State committee, and the county extension agent is a member of the county committee.

During the year farmers invested their own money, time, machinery, and labor as their part of sharing with the Federal Government the cost of approved conservation measures. Every farmer was eligible to participate on a voluntary basis. The year before—calendar 1960—over a million participating farmers received $213 million in total assistance. Since the farmers' share is about half the total cost

of the conservation practices, the total conservation investment under the program was about $426 million. Approximately four-fifths of the cost-share funds in 1960 were used to establish long-term conservation practices with enduring benefits.

In general, the ACP offered cost-sharing on practices that helped farmers establish the kind of conservation they needed when they could best fit the measures into their farming operations. The program helped farmers adopt or advance conservation systems of farming in the public interest to help assure an agricultural resource capacity available to meet the future food and fiber requirements of an expanding population. Conservation measures applied to farmlands are important in preventing floods, conserving water supplies, and reducing sedimentation of streams and siltation of reservoirs. Cities as well as farms benefit from this sort of conservation on the watersheds of the Nation.

Of particular importance in 1961 is the effort being made to help many small farmers with underdeveloped resources to get started in conservation farming, introducing them to other assistance offered through other programs of the Department, and jointly working with other agencies and groups to make agricultural conservation cost sharing a meaningful tool in meeting some of the problems facing rural areas development committees.

In 1961 the ACP continued to give significant amounts of assistance to farmers to help further watershed conservation programs sponsored by local people and organizations.

Special emphasis was given to the use of ACP cost sharing to accelerate the installation of on-farm conservation measures needed to protect watershed lands and water storage and other structures involved in flood prevention or watershed protection.

Emergency conservation funds administered by the ACP were used to help rehabilitate and restore farmland damaged by flood disaster, and to help conserve, manage, and properly distribute water in the public interest on farmland in areas devastated by severe drought. Nearly $2 million was allocated for use by farmers of 6 States and Puerto Rico to carry out emergency conservation practices made necessary because of flood disaster in 45 counties.

Farmers of 164 counties in 9 States were authorized to use emergency ACP practices needed as the result of drought. Over $9 million of special emergency funds were allocated for this purpose.

Conservation Reserve

Legal authorization to take new land into the Conservation Reserve of the Soil Bank expired with the close of calendar 1960. Annual payments, however, will continue to be made through 1969 in accordance with contract terms for the period of individual contracts.

As of July 1, 1961, a total of 301,543 contracts were still in effect, covering 28,389,695 acres, consisting of 2,150,583 acres planted to forest trees, 25,903,653 acres in protective grass cover, 16,625 acres in water-storage facilities, and 318,834 acres devoted to specific wildlife habitat. At the end of 1961, contracts were scheduled to expire on approximately 2.2 million acres, releasing that much acreage from contract restrictions and leaving around 26.2 million acres under con-

tract. Annual Conservation Reserve rental payments obligated to be made in 1961 totaled $336,369,397.

This decrease in acreage under contract reduces the need for funds to make annual payments, but it raises questions for both farmers and Government as to the future use of the land, much of which will have a higher production potential than when it was placed in the Conservation Reserve. Nearly 9 million Great Plains acres were retired from crop use into native grasses, and much of this acreage can be expected to remain in grass. The more than 2 million acres planted to forest trees can be expected to be permanently diverted from crop use.

Allotment, Quota Programs

Marketing quotas—and acreage allotments, by which the quotas are made effective—were again used in 1961 as a means of apportioning the available market fairly among growers of each of five major crops—wheat, cotton, rice, peanuts, and tobacco of nine principal types.

As directed by law, marketing quotas for the 1961 crops had been approved in growers' referendums held during previous years. Through December, similar votes in calendar 1961 approved quotas for 1961, 1962, and 1963 of fire-cured and dark air-cured tobacco (February 24), for the 1962 crop of wheat (August 24), for the 1962 crops of upland and extra long staple cotton (December 12), and for the 1962, 1963, and 1964 crops of flue-cured tobacco (December 12).

Over the years, growers' marketing quota referendums, with few exceptions, have indicated an overwhelming acceptance of the quota-allotment principle. Through the balloting process, they have approved, as of November 1961, quotas for 9 consecutive crops of wheat, 7 crops of rice, 8 crops of cotton, 14 crops of peanuts, and for varying numbers of tobacco crops; for several of the more widely grown types of tobacco, quotas have been approved and in effect continuously for the past 21 years.

Federal Milk Marketing Orders

About 45 percent of all the milk sold wholesale by farmers in the United States is now marketed under Federal milk marketing orders. During the year ended June 30, 1961, about 192,000 dairy farmers sold nearly 47 billion pounds of milk—worth $2 billion—to handlers operating under marketing orders. These orders assure the dairy farmer a uniform minimum price based on current supply and demand conditions. The program also helps assure adequate supplies of pure, wholesome milk to consumers. Nearly 92 million persons live in these milk marketing order areas.

Because of the importance of the milk order program to dairy farmers, I appointed soon after I took office a special committee to examine and study current operations and problems under all the Federal milk marketing orders. Composed of experts in milk marketing economics—production, processing, and marketing—and drawn from every section of the country, the Committee is under the leadership of Dr. Edwin G. Nourse.

Eighty-two milk marketing orders were in effect as of October 1961—two more than a year earlier. Four new orders were added—Indianapolis, Ind.; Greater Youngstown and Warren, Ohio; and St. Joseph, Mo. There were mergers in two areas: The Quad Cities and Dubuque orders were merged January 1, 1961, and the Bluefield and Appalachian orders were merged March 1. Hearings held during the year on proposed programs for other new areas included Lubbock-Plainview, Tex., Madison, Wis., and a large area in Minnesota and North Dakota.

The marketing areas under 14 orders were expanded, adding 2½ million persons to the total population included in regulated marketing areas.

The continued trend to bulk cooling of milk on farms and delivery by bulk tank trucks has changed marketing methods in many areas.

On June 1, 1961, a new policy was adopted by which all future producer referendums on the approval of new orders or changes in orders would be conducted by mail balloting. The new procedure will reduce both the time and expense of conducting referendums and provide a more convenient method for milk producers to express approval or disapproval of an order.

New Marketing Order Possibilities

The Agricultural Act of 1961 extended possible utilization of marketing agreements and orders by making any agricultural commodity eligible that is not specifically excluded in the act. Heretofore, only commodities listed in the Agricultural Marketing Agreement Act of 1937, as amended, could have marketing orders.

The first commodity group to investigate the new possibilities of applying a nationwide marketing order was the turkey industry, which requested that an advisory committee be appointed to study its industry marketing problems. The Committee, composed of members from all segments of the turkey industry, met in Washington, D.C., on October 12–13, and passed a resolution to have the Department draft proposed marketing orders for turkeys and for turkey hatching eggs. The Committee reconvened on October 19–20 in Washington to review the proposed orders, written along guidelines the Committee laid out, and to submit its recommendation to me as Secretary.

Other commodity groups investigating the possibilities of applying marketing orders are the broiler, rye grass seed, peanut, mint, and lamb industries.

Sugar Program

Public Law 86–592, approved July 6, 1960, extended the Sugar Act of 1948, as amended, through March 31, 1961. It also authorized the President to determine Cuba's sugar quota for the balance of 1960 and the first 3 months of calendar year 1961 and to obtain replacement supplies, as prescribed, in the event of a reduction in Cuba's quota.

Sugar requirements or total quotas for the calendar year 1960, initially established at 9,400,000 short tons, raw value (with a statutory quota share of 3,119,655 tons for Cuba) were finally set at 10,400,000 tons. On July 6, 1960, following approval of Public Law 592, President Eisenhower issued a proclamation reducing Cuba's

1960 quota by 700,000 tons and delegating to the Secretary of Agriculture, with the concurrence of the Secretary of State, the authority to make nonquota sugar purchases to replace sugar not taken from Cuba. Subsequently, actions were taken authorizing the total purchase of 1,200,000 tons of nonquota sugar, from 18 foreign countries, for importation during calendar year 1960. However, the quantity authorized for purchase from the Dominican Republic was subject to an entry fee of 2 cents per pound, payable to the U.S. Government.

Sugar requirements for calendar year 1961, initially set in December 1960 at 10 million tons, remained unchanged at the close of fiscal year 1961. Quotas were initially established for the first quarter only, since the act was then due to expire March 31, 1961. By Presidential proclamation, Cuba's quota was set at zero. Subsequent action by the Department—concurred in by the Secretary of State—authorized the importation of 824,299 tons of replacement sugar during the first quarter from 20 different countries. The quantity authorized for the Dominican Republic was conditioned upon payment of an entry fee of 2¼ cents per pound.

On March 31, 1961, the President approved Public Law 87–15, extending the Sugar Act through June 30, 1962, and issued a proclamation determining Cuba's sugar quota at zero for the full calendar year 1961. Under a continued delegation of authority, and with concurrence of the Secretary of State, we took actions in April and June 1961 to obtain replacement supplies, totaling 2,422,896 tons, from 21 foreign producing areas. No allocation was made to the Dominican Republic, since Public Law 87–15 relieved the President of any obligation to purchase any part of the Cuban quota replacement sugar from any country with which the United States does not have diplomatic relations.

The wholesale price of refined cane sugar, at New York, ranged between 9.40 and 9.70 cents per pound during fiscal 1961, while the average price was 9.56.

Conditional payments approximating $73 million were made on the 1960 crop to about 65,300 sugarbeet and sugarcane producers in 24 States, Puerto Rico, and the Virgin Islands. Sugar tax collections during fiscal year 1961 totaled about $95.7 million.

In the fall of 1961, the Department was actively studying all phases of the complex sugar problem, both domestic and foreign, preparatory to developing its recommendations to the Congress for longer term sugar legislation, which the chairman of the House Committee on Agriculture has indicated would receive preferred consideration in the next session.

The Wool Program

The wool incentive price for the 1962 marketing year which begins April 1, 1962, was announced in the fall of 1961. It continues in effect the price of 62 cents per pound for shorn wool announced for previous years.

After several years of rising sheep numbers and increased wool production, a small decline occurred in 1961, chiefly because of economic factors. Wool production in 1961 is estimated at 261.4 million pounds, about 2 percent below 1960.

Since the National Wool Act went into effect in 1955 with a goal of stimulating U.S. shorn-wool production toward a 300-million-pound yearly output, production has moved upward from 214 million pounds in 1955 to well over 260 million pounds in 1960 and 1961.

However, during much of the 1960–61 year disappointing returns to producers, particularly from the sales of lamb, the principal source of income for sheep producers, seemed not only to be slowing, but also retarding somewhat, expansion in the sheep industry.

The 62-cent incentive level for 1962, the same as for the first 7 years of the program running from 1955 through the 1961 marketing years, was set in line with the requirements of the legislation. While the law requires an incentive level that will move production toward the 300-million-pound level, it also provides a limitation on the amount available for making payments. These payments cannot exceed 70 percent of the duties collected on imports of wool and wool manufactures since January 1, 1953. In only 1 out of the 6 years for which payments have been made so far has the payment total been appreciably less than 70 percent of the yearly tariff duties collected and in one of the years the payment figure was substantially greater than this.

Emergency Disaster Assistance

Disaster committees, established in each State, Puerto Rico, and the Virgin Islands, cooperated with the Department in providing needed assistance to farmers and ranchers in alleviating the losses caused by drought and flood.

Drought continued or became more severe in Western and North Central States. Ranges in these areas produced little forage for livestock; farmlands produced scanty crops; feed shortages developed; and the need for water for livestock and for irrigation became serious problems.

In East Central and some other States, floods caused by heavy spring rains severely damaged pastures, croplands, and waterways, preventing the planting of crops or causing serious feed shortages and crop losses.

Available to farmers and ranchers in designated disaster areas throughout the year were the emergency livestock feed program, under which eligible farmers could buy feed grain owned by the Commodity Credit Corporation at current local support prices; the use of haying and grazing privileges on lands previously set aside for conserving uses; and emergency cost-sharing conservation assistance to encourage early repair of lands seriously damaged by drought or flood.

With the signing of the Agricultural Act of 1961 on August 8, 1961, farmers and ranchers in designated disaster areas could buy CCC-owned feed grains for their "foundation" herds (as distinguished from their "feeder" stock) at 75 percent of local support prices.

Through this combination of programs stockmen were able to avail themselves of fall and winter feed supplies at reduced prices, and also—as specifically authorized—to graze their livestock and cut hay on lands set aside for conservation uses. These lands diverted from crop production under the Conservation Reserve of the Soil Bank or under the 1961 feed grain program cannot be used for grazing or haying except under emergency conditions.

Disaster areas were allotted emergency funds under the Agricultural Conservation Program (ACP) to help farmers and ranchers meet the cost of emergency measures needed to offset or undo drought or flood damage.

CCC Price-Support Assistance

When the new administration took office in January 1961 it faced the need to take immediate steps to improve the economic position of farm families. Incomes of farmers, as compared with those of nonfarm people, had sunk lower than any time since the 1930's. Something had to be done, and quickly, to reverse the slide off of farm income.

Under our authority to raise farm price supports when it is in the national interest, we promptly raised the support levels of a number of important farm commodities as a first step in shoring up farm income.

The list of commodity supports which were raised includes corn, cotton, peanuts, rice, butterfat and milk, barley, grain sorghums, oats, rye, cottonseed, flaxseed, soybeans, dry edible beans, and honey. The support level on cotton was set at 82 percent of parity, compared with 70 percent of parity as proposed by the previous administration. This boost amounts to about $25 a bale. It could mean an increase of as much as $350 million for farmers in cotton-growing areas.

The price support on manufacturing milk was raised to $3.40 a hundredweight, compared with $3.06 a year before and $3.20 set by an act of Congress in September of 1960, shortly before the election. The support price for butterfat was set at 60.4 cents per pound, nearly 4 cents more than a year earlier.

The support price of 1962 crop wheat was set at $2 a bushel, up 22 cents from the support level for the 1961 crop. Of this crop, the larger, winter wheat portion is now in the ground. In addition to higher support prices available at harvest time, growers of this wheat who are cooperating in the stabilization program have already received an advance payment on what is due them for placing part of their wheatland into soil-conserving practices.

Taken altogether, these increases in price support plus other action programs such as the 1961 feed grain program have been the foundation for a boost in net farm income in 1961 of about $1 billion over 1960.

CCC Farm Storage Assistance

Early in the year, several actions were taken to lend encouragement to farmers in providing ample grain storage capacity on farms.

Acting under Presidential direction to accelerate one-half of the payments due farmers for storage of crops under price-support loans, we made advance payments, amounting to almost $25 million. These advance payments provided farmers with cash to help meet production costs in the spring of 1961 and at the same time demonstrated the benefits of farm storage, thus prompting others to plan for overall additional capacities.

When a comprehensive reseal program for grains under farm-stored price-support loans was announced in late February, farmers, for the first time, had assurance of a longer-than-1-year program. Provi-

sions were announced enabling the 1960 crops of corn, wheat, and grain sorghum under farm-stored price-support loans to be held for a 2-year period following maturity dates of the loans in the spring and summer of 1961. The program also provided for resealing the 1960 crops of farm-stored barley, oats, and rye, as well as continuing under reseal several previous years' crops. By providing payments during the reseal period, these provisions assisted farmers in financing storage.

To help smaller farmers, we reduced in March the downpayment on loans for financing farm storage. Farmers were permitted to borrow up to 95 percent of the outlay for farm storage facilities costing 40 cents per bushel or less to build. Previously, loans had been limited to 80 percent of the cost. The loans, running for 5 years from the date the loan is taken out, may be repaid in four annual installments. Interest is at the rate of 4 percent.

Farm storage provides an effective tool to aid in the orderly movement of grain. It permits holding grain off the market at harvesttime when commercial facilities are often at capacity levels and market prices are seasonally low, while keeping the grain in the production areas where feed grains, especially, are normally consumed. Adequate storage capacities, both farm and commercial, are vital for farmers' participation in the price-support program.

CCC Inventories

With its report of financial condition and operations for the fiscal year 1961, the Commodity Credit Corporation started accounting for its costs of storing, transporting, and handling CCC-owned commodities as realized losses. Previously its accounting practice had been to show as investment in CCC-owned inventories not only the original acquisition cost but also the accumulated storage, handling, and transportation costs since acquisition.

The new method of reporting will both provide a more realistic statement of the actual value of CCC commodity holdings and make more meaningful the reports of estimated losses on future dispositions from the inventories.

Storing, handling, transporting, processing, and inspecting the large commodity holdings of the Commodity Credit Corporation are expensive operations. During fiscal 1961, CCC storage and handling costs on commodities acquired under price-support operations totaled $462.1 million; transportation costs, $164.1 million; and other related costs $7.3 million—a total of $633.5 million. Accumulated storage, handling, and transportation costs, totaling $1,269 million as of June 30, 1961, and previously accounted for as part of the CCC "investment" in commodity inventories, were transferred as of that date to the "realized loss" account.

The cost value (new accounting basis) of commodities acquired by CCC as a result of price-support operations and held in inventory as of June 30, 1961, totaled $5,563 million. It is estimated that the Corporation will lose approximately $1,528 million on these commodities when they are ultimately moved into consumption. This left a net book value of $4,035 million for the CCC inventories as of June 30, 1961.

Price support extended by CCC on 1960 crops through June 30, 1961, had a dollar volume of $3,366 million, slightly higher than the $3,194 million extended on 1959 crops through the same date in 1960. More than half of the price support extended—$1,765 million—was in the form of loans. Some $148 million was extended under purchase agreements, and purchases of commodities not under purchase agreement totaled $1,454 million.

During the fiscal year, CCC moved into consumption commodities with a cost value of $4,058 million and received $3,162 million in return. Sales for dollars accounted for proceeds of $1,789 million, about 57 percent of the total amount received.

Federal Crop Insurance Corporation

In human terms, the value that Federal all-risk insurance protection can have for farmers is well expressed by the following statement in a letter from a Lake Crystal, Minn., policyholder:

> I want to thank you for the privilege of having had this insurance for the past 2 years. You, the agents, adjusters, and office staff were always prompt, fair, just, and courteous.
> I believe a broad insurance of this type is essential to any farmer.

In business terms, the benefits and potential service of crop insurance to the farmer and the entire rural community are aptly described by the following short excerpt from a March 8, 1961, editorial appearing in the LaMoure Chronicle, LaMoure, N. Dak.:

> Rain, lack of rain, wind, sun, rust, grasshoppers and other things can wipe out a farmer's 1961 livelihood overnight. He can go to bed at night with a $30,000 crop on his fields, and wake up in the morning with nothing left. I do not understand how any farmer can stand to be without crop insurance. * * * I am interested in the financial strength of every farmer in this territory. Unless they prosper, I won't. I just don't believe there are many farmers rich enough to stand up under a major crop loss with the present high cost of farming.

Many farmers in the Northern Plains States suffered total crop loss and thousands were brought to the brink of crop disaster in 1961. The heavy volume of requests for disaster assistance emphasized the need for accelerating the rate of expansion of Federal crop insurance to additional crops and counties. If this insurance protection is to play a major role in alleviating the economic distress in times of crop disaster it must be available and used by farmers in substantially all counties where income from crops is important.

Action was taken by the Corporation to extend crop-insurance operations to 100 additional counties for 1962, the maximum expansion authorized by Congress for any crop year. This is in contrast to the net expansion of only 21 counties between 1953, when 847 counties offered insurance, and 1960, when the program operated in 868 counties.

A new insurance plan for raisin grapes was developed and placed in operation for the 1961 crop year in seven San Joaquin Valley counties in California. More than 1,500 producers applied for protection of their crop investments against loss from rain damage while the grapes were being dried for raisins. The Corporation's liability under the raisin insurance program is estimated to be in excess of

$10 million. A new and simplified plan for irrigated grain sorghum will be offered in 18 counties for the first time in 1962. Meetings have been held with representative peanut growers and preliminary plans are being made to insure peanuts for the first time in 1962 in a few counties on a trial basis. Potatoes and dry edible and canning peas will also be insured in a limited number of counties for the first time in 1962.

County coverages and premium rates have been reworked for spring crops in 1962 and winter crops for 1963 to incorporate crop-production data and loss experience for the most recent crop years. For most counties and crops this has resulted in a substantial increase in the amount of insurance protection offered and a more favorable premium rate. With rising farm production costs and a narrowing margin of profit, it is essential that the amount of insurance protection be closely related to current crop investment requirements.

We plan a vigorous effort to promote better understanding and expanded farmer participation in this self-help plan against crop disaster. A survey of the field administration of the program has been completed and changes are being made to strengthen and improve operations to provide the greatest possible service to farmers.

PROVIDING ADEQUATE CREDIT

Farmers Home Administration

The following is a case history of a southern farmer and FHA client:

> All his life, Leroy James, of Montezuma, Ga., wanted to be a farmer—an efficient, successful farmer.
>
> In high school, James was an above-average student of vocational agriculture. But, when he finished school, the best he could do for a long time was to farm part time as a tenant, and piece out a living for his wife and two children by doing odd jobs occasionally at the local freezer locker plant.
>
> Seven years ago James decided he just had to move up the agricultural economic ladder. He came to the Farmers Home Administration with little in the way of property—some clothing, a few pieces of furniture, subsistence livestock, and a small amount of farm machinery—but with other more important assets. He knew how to farm; he liked to work; and he had plenty of ambition.
>
> The three successful farmers on the local Farmers Home Administration county committee liked what they saw, liked his ambition, and his farming talents. Deciding that the only things standing in James' way were inadequate financing and the lack of a carefully developed farm management plan, they approved his application for credit—$6,215 in all.
>
> James and his wife bought a carefully selected 107-acre farm, repaired the home and barn, built a machinery shed, and cleared the land. As farmowners, they were able both

to borrow money from the local bank to finance operating expenses and make arrangements with equipment dealers to buy on time the additional equipment they needed. They used ASC funds to develop their pastures.

The James family turned hard work into gradual success. To spread out the overhead machinery costs and use more fully all the family labor, they rented additional land. They began building up their livestock herd and kept a close eye on the family record book of income and expenses. In off hours James made himself and his machinery, truck, and trailer available for custom work for his neighbors, especially during the harvest seasons for peaches, cotton, peanuts, and corn. One year this work alone brought in over $2,300.

During slack seasons and other odd moments, James improved the home and other farm buildings, using FHA loan funds to buy construction materials.

A Georgia newspaper ran a full feature story on the James family, and The New Farmers of America selected Leroy James as 1959's most outstanding young Negro farmer of the Southeast.

Today, James and his family have a net worth of over $10,000. They are grossing more than $7,000 a year. They've a well-furnished, remodeled home, a new barn, a tool shed, a full line of farm equipment, and a hog-beef cattle livestock program. They are well on the way to clearing up the mortgage on the farm.

This is typical of the way Farmers Home Administration credit and supervision are helping thousands of small farmers work their way up the economic ladder to a better and more fruitful living.

The FHA loan program, administered through 1,427 farflung offices, serves agricultural areas throughout the United States, Puerto Rico, and the Virgin Islands. Credit provided by the agency supplements, but does not compete with, the financial services of other lenders. Committees composed of three local farmers determine the eligibility of applicants and assist the agency's county supervisors in adapting national policies to local conditions. Each FHA loan is accompanied, to the extent necessary, by technical assistance in farm and money management.

The activities of the agency reached a new peak during fiscal 1961 when loans made and insured by FHA climbed to a record $395,684,000—28 percent more than the $308,872,000 advanced to farmers in fiscal 1960.

Several telling factors account for this sharply increased activity. The low net return farmers have had in recent years has deepened the need for FHA-supervised credit. Many established farmers, their equities exhausted, are today unable to obtain loans from conventional sources.

The technological revolution, moreover, makes necessary an increasing amount of capital for the successful, efficient operation of a farm. Young people just getting started are experiencing a mount-

ing difficulty in obtaining the funds they need to become soundly established.

FHA strives to fill this credit gap. The agency advances credit based on the repayment ability of the farmer. It may make loans up to the appraised value of the security. And, perhaps most important of all, with each loan FHA provides technical farm and money management assistance.

These factors make FHA *able* to serve the farm families most in need of supervised credit.

In the spring of 1961, FHA also demonstrated a new *willingness* to do so, and this no doubt contributed to the record demand for its services.

The new willingness to serve was highlighted by the release in February 1961 of $50 million for farm housing loans and $35 million for operating loans. These funds were appropriated by Congress, but previously held in reserve. The following statistical story indicates how much the Leroy James family and thousands of other farm families depend on FHA services.

- About 183,000 farmers, including those who took out loans in previous years, used FHA credit services during 1961.
- During the year more than 24,500 borrowers repaid their loans in full.
- Operating loans totaling $233,394,000 were made to 75,338 farmers. These funds, invested in machinery and livestock or used to buy fertilizer, insecticides, tractor fuel, and other farm and home operating requirements, enabled borrowers to make fuller use of their land, labor, and management resources.
- Loans amounting to $70,341,000 for construction and repair of farmhouses and other essential farm buildings were made to 8,935 farmers.
- Emergency loans totaling $26,576,000 helped 7,941 farmers to resume normal operations after they had been struck by drought, floods, and other disasters.
- Farmownership loans for $57,229,000 were extended to 3,972 farmers to improve, enlarge, and buy family farms, and to refinance debts. Of this amount $25,329,000 was advanced through the insured-loan program.
- Soil- and water-conservation loans totaling $4,444,000 were advanced to 516 farmers and 39 associations, $1,448,000 of the amount being insured. These loans are used mainly to develop irrigation and domestic water-supply systems.
- Watershed-protection and flood-prevention loans to help organizations protect and develop land and water resources in small watersheds totaled $3,700,000 in fiscal 1961.
- Collections of principal and interest during fiscal 1961 amounted to $307,600,000, compared with $307,300,000 a year earlier.
- FHA's outstanding loans as of June 30, 1961, totaled $1,274 million, about 10 percent above the $1,163 million the year before.

During the summer of 1961 the supervised credit program was further broadened and expanded. The Housing Act of 1961 extended the rural housing program to residents of small rural communities, even though they were not farmers. The Agricultural Act of 1961 broadened the operating and farmownership programs to cover the full range of family farms. It increased the services FHA can provide to part-time farmers, operators of small farms, new farmers trying to sink their roots more deeply in the land, and established farmers seeking to make large-scale adjustments in their operations. This new legislation also made it possible for residents of small rural communities to obtain financial help in developing their community water systems, and further improved the emergency and insured loan programs.

FHA, like USDA agencies generally, is now better able and more willing to help farm people move forward toward greater prosperity and greater contributions to the U.S. economy during the 1960's.

Rural Electrification Administration

REA, in the final months of the 1961 fiscal year, was able once again to turn full attention to its statutory responsibilities, free of political distractions and proposals for a higher interest rate on its loans.

Norman M. Clapp, of Wisconsin, on March 9, 1961, became REA's seventh Administrator. By June 30, 1961, steps had been taken in REA to:

- Broaden the criteria for making generation and transmission loans.
- Reestablish a power supply division in REA.
- Announce all-out support for protection of borrowers' service areas against inroads by unfriendly suppliers.
- Widen the applicability of the "section 5" loans for financing consumer facilities.
- Reappraise the telephone program.
- Determine a new telephone loan security policy.
- Undertake a program of rural areas development, with appointment of a staff to handle it.

Electric Program

Rural people continue to use greatly increased amounts of electricity. Average monthly consumption per consumer on the lines of REA borrowers climbed to 467 kilowatt-hours during calendar year 1960, up 8.5 percent over the previous year.

The increasing importance of power generation and supply is now recognized as the key factor in the further development of rural electrification. At present, the installed generating capacity financed by REA totals about 1 percent of the electric industry's total capacity.

A loan of $60.2 million, the largest in the history of REA, was made June 15, 1961, to Hoosier Cooperative Energy, Inc., of Indiana. It provides for construction of a 198,000-kilowatt steam generating plant, 1,552 miles of transmission line, and related facilities in southern Indiana.

Hoosier was one of three new power-type electric borrowers added during the year. Together, the three will supply power requirements for nearly 100,000 rural consumers.

During fiscal year 1961, REA approved $274.5 million in electrification loans. More than 55 percent of this financing was for generating and transmission purposes.

There are now 990 active borrowers in the electric program, 928 of them being rural electric cooperatives, owned and operated by the members they serve. REA borrowers, located in 46 States and Puerto Rico, are serving 4.8 million rural consumers, or a total of more than 19 million persons. More than half of all electrified farms in the U.S. are served by systems financed through REA.

Of the $274.5 million in loans approved during fiscal 1961, almost three-fifths were approved between February 4, 1961, when responsibility for the REA programs was assumed by appointees of this Administration, and June 30, 1961. During this period REA approved 136 electrification loans, amounting to $160.3 million.

The great stability and soundness of the program is indicated by the fact that by June 30, 1961, electric borrowers had made payments of nearly $1.5 billion to the Federal Government on their REA loans. This included $806,166,417 repaid on principal, $474,846,764 paid on interest, and $169,394,387 paid in advance of due date. The average net worth of electric borrowers by the end of fiscal 1961 had climbed to 19.8 percent of their total assets.

Telephone Program

In reappraising the rural telephone program, REA studied the extent to which its borrowers have carried out area coverage in their improvement and expansion of service. The proportion of farms with telephones has increased from less than two-fifths in 1949, when the telephone program began, to about two-thirds today. However, more than half of the total number of farms outside the base rate areas of the borrowers are still without telephones. The 1959 census data show 462 counties in the U.S. as having 500 to 1,000 farms without telephones, another 233 counties having 1,000 to 2,000 farms without telephones, and 45 counties having more than 2,000 farms without telephones. The need for greater emphasis on area coverage is obvious.

REA is actively seeking to remedy this situation.

Telephone loans during fiscal 1961 reached a new high of $142.8 million. Fifty-six new borrowers were added to a list now numbering 753. Of these, 543 are commercial companies and 210 are cooperatives.

Loans for buried plant doubled during the fiscal year, accounting for almost half of the total outside plant financed by REA during the period. Where the use of buried plant is practical, it yields excellent subscriber service at reduced installation costs, and the record so far shows smaller upkeep and maintenance costs.

Including the 241,000 subscribers provided for in fiscal 1961 loans, the telephone program will serve 1.6 million subscribers, or more than 6 million persons in 45 States and the Virgin Islands.

The soundness of this program is indicated by borrowers' payments to the Federal Government amounting to $55,405,925. This includes

$25,628,000 repaid on principal, $24,735,395 of interest, and $5,042,530 paid ahead of schedule.

Rural Areas Development Program

REA launched a third major activity during the latter half of fiscal 1961, through its participation in the Department's rural areas development program. A newly formed RAD staff within REA provides technical advice and assistance to REA borrowers seeking to promote new "homegrown" industries in their service areas. In support of this program REA broadened its policy for loans under the consumer financing provision (sec. 5) of the Rural Electrification Act. Where credit is not otherwise available on reasonable terms, REA now may make these loans to help consumers acquire electrical equipment, including machinery for industrial, commercial, and agricultural purposes. REA is one of 12 USDA agencies taking an active role in the program to help rural areas increase employment opportunities and raise income levels.

THE RECORD AND THE OUTLOOK

In concluding this report, it is appropriate to scan the pertinent statistics of U.S. agriculture in 1961 and to summarize the outlook of the months immediately ahead. As we have seen, 1961 was a year of rising income, of continuing and more vigorous use of abundance. It saw the beginning of production adjustment for feed grains and of a commodity-by-commodity approach to farm problems. It was a year of renewed hope, a year of promise that the gains of the present would be continued in the future.

Farm Prices and Income

Cash receipts from farm marketings for 1961 were estimated at $35.2 billion, 3½ percent larger than in 1960. Both the volume of marketings and prices received by farmers rose slightly. Receipts from livestock and livestock products totaled $19.4 billion in 1961, while crop receipts were $15.8 billion.

Total Government payments to farmers were higher, mainly as a result of payments under the 1961 feed grain program.

Realized gross farm income was $39.9 billion, up $2 billion from 1960.

Production expenses of farm operators were up about 3 percent. Prices paid for production items, interest, taxes, and farm wage rates were slightly higher, with interest and taxes showing the sharpest gains. There were also increases in the quantities of production inputs purchased by farmers.

Realized net income of farm operators is estimated at $12.8 billion, up $1.1 billion from 1960 and highest since 1953.

Review of Food Situation

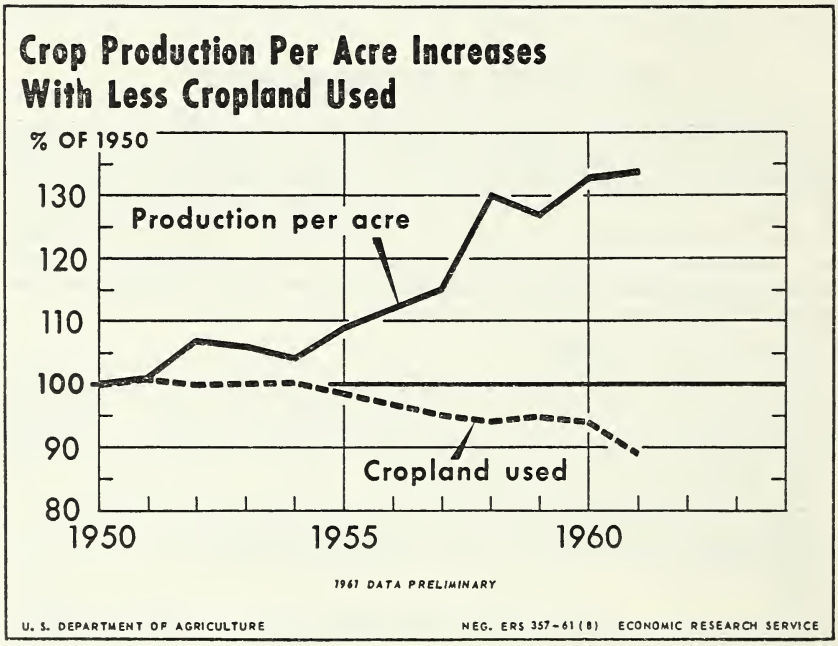
Domestic use of our farm food commodities reached an alltime high during 1961. Consumption of food per person was maintained about 13 percent above the prewar level of 1935–39.

Increased marketing costs raised retail food prices a little higher in 1961 than in 1960. The farmer's share of the consumer food dollar was 38 cents, compared with 39 cents in 1960.

More beef and lamb were available to consumers, but pork and veal supplies were down. There was more poultry meat than a year earlier, but fewer eggs. Supplies of milk and dairy products were up moderately. Fresh vegetables were not as plentiful during the summer and early fall of 1961 as a year earlier, but there were somewhat more fresh and processed fruits and processed vegetables. Potatoes were in heavy supply. Edible vegetable fats and oils in 1961 were more plentiful than a year earlier. Grains for cereals and bakery products continued to exceed domestic needs and exports.

Farm Output

Total crop and livestock production in 1961 equaled the record high of 1960. A 2-percent reduction in crop production was offset by larger output of livestock and livestock products.



Heavy participation in the new feed grain program was primarily responsible for cutting planted acreage about 4.5 percent (15 million acres) below 1960, to 310 million acres, the smallest since 1912. Harvested acreage of 296 million acres—20 million, or 6 percent below 1960—was the smallest since 1909 when the current statistical series began. Average yields per acre at 147 percent of the 1947–49 average exceeded by more than 2 percent the previous record reached in 1958 and 1960.

With acreages of corn and sorghum grain cut 18 and 29 percent. respectively, mostly due to the feed grain program, production of feed grains in 1961 was 10 percent lower than in 1960. Corn for grain

dropped 7 percent; grain sorghum, 22 percent; oats, 12 percent; and barley, 9 percent. The yield of corn for grain—61.8 bushels per acre, 7.3 bushels above the previous record of 1960—reflected excellent growing conditions in the Corn Belt. Yields of grain sorghum also hit a new high of 43.8 bushels, up 4 bushels over the 1960 record.

Drought in the Northern Plains resulted in a spring wheat crop only 64 percent as large as the previous year's. Total wheat production was down 9 percent from 1960. Output of rice decreased about 2 percent from 1960.

Soybean production was a record 693 million bushels, 25 percent above 1960. Acreage was up 16 percent, and yields were over 25 bushels per acre. The drought-afflicted flaxseed crop was down 28 percent. Lower yields reduced peanut production about 1 percent from 1960.

The 14.3-million-bale cotton crop in 1961 was about the same as in 1960. Harvested acres increased about 2 percent, but yields were down about 2 percent.

Output of livestock and livestock products was record high in 1961, up about 5 percent from 1960 and nearly one-fourth more than in 1950.

Marketings of cattle in 1961 were up a little from a year earlier. Nevertheless, cattle numbers continued to expand. Lamb slaughter was up sharply from 1960. The 1961 pig crop was about 5 percent larger than that for 1960. Marketings of pigs in 1961 from the 1960 fall crop and the 1961 spring crop were about the same as in 1960. The hog-corn price ratio was favorable throughout the year.

The downtrend in milk cow numbers slowed greatly. With rising milk production per cow more than offsetting the moderate decline in cow numbers, production of milk in 1961 reached a new record of 125.4 billion pounds compared with 122.8 billion in 1960. An increasing proportion of the milk produced is being channeled into manufactured dairy products.

While egg production in 1961 was slightly smaller than in 1960, production of broilers and turkeys in 1961 set new records, with output of turkeys up nearly one-third over 1960.

Looking Ahead

As we face the future, we look for expanding markets for farm products in 1962 at home and record shipments to markets abroad.

Net farm income is expected to hold the gain of nearly one-tenth registered in 1961.

The average price level of all farm products will probably stay close to the 1961 level, but a rise is anticipated in the prices of wheat and feed grains.

Consumers will find plenty of food available in 1962; and, with consumer income climbing, the consumption of food per person, after having been stable for 3 years, will probably rise a little.

The average consumer will eat a little more meat, particularly more pork. Poultry will continue to be more than ample, and supplies of milk and dairy products will also be abundant.

Supplies of food fats and oils, fruit, vegetables, potatoes, and cereals will all be plentiful.

As has been the case for years in the United States, abundance is again the keynote of the food and agricultural situation.

But abundance brings with it problems as well as blessings; problems that are difficult, complicated, and serious.

To preserve in this Nation the qualities that have made our agriculture the greatest in the world; to maintain the dignity and the independence of the American family farm; to assure the efficient farmer an opportunity to earn the income he merits; and to assure to all the people of this Nation, now and in the future, a continued abundance of the food and fiber that are so essential to human life and development; these problems must be solved in the years immediately ahead.

I believe that we can adopt policies and programs that will do the job. But to work out such policies and programs, we must, as a Nation, meet five prerequisites:

1. We must face honestly and realistically the tremendous changes that the technological revolution has brought about in agriculture.
2. We must gear our agricultural policies to the new economy of abundance that is at one and the same time the great problem and the great hope of the years ahead.
3. We must avoid the stereotyped thinking that is based on conditions of the past that no longer exist, and avoid the kind of controversy that is based on cliches, on terminologies, and on arguments that are alien to American thought and experience.
4. We must exert greater effort to bring about public understanding of the needs and contributions of American agriculture.
5. We must formulate our policies and programs in the light of the needs of all the people of this Nation, and their relationships with the rest of the world.

Notable progress along these lines has already been achieved. The major task, however, is still ahead.

In developing the farm programs for the future, we must take the road that promises a long-range solution to our twin problems of low farm prices and high public costs. This envisions farm programs that will:

1. Reduce farm output to a level in line with our needs for domestic use, export, and the meeting of our international commitments—at prices that permit fair returns to farmers.
2. Provide some further reduction in output of grains, particularly, to permit Government stocks to be reduced gradually to manageable levels.
3. Then adjust output to the rate of demand expansion, so that we do not again slide into the awkward and costly situation we are in today.

This approach is embodied in the feed grain and wheat stabilization programs for 1962. But, since these are temporary operations,

we must have new programs that go beyond 1962 for wheat and feed grains. We also must deal realistically with additional commodities that are either in distress, or which are resulting in unreasonable costs to the public.

I deem it my particular task to help the American people keep their eyes on the agricultural goals. These broad goals, I believe, deserve the support of all our people. Let me sum them up once more.

We seek a continued abundance of food and fiber, for today and for the future, for these provide the most basic needs of human life. We seek a farm economy that will provide these things at prices that are fair and stable. We seek reserves adequate for any emergency, and we seek to avoid the waste that results from production of more than can be used. We seek to develop the conservation and best utilization of our land and water resources, in the interest of all our people and of future generations. We seek to do this within a framework that will assure the farmer of an opportunity to earn a fair income without exploitation of either the taxpayer or the consumer. We seek the maximum use of our agricultural productivity to promote progress and freedom in the world.

The achievement of these goals presents the most difficult challenge in the entire field of domestic problems in the United States today. But I am confident they can be achieved, if we, as a people, work together.

U.S. GOVERNMENT PRINTING OFFICE:1962